SPECULATION AND THE CHICAGO BOARD OF TRADE

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SPECULATION

AND THE

CHICAGO BOARD OF TRADE

BY

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INTRODUCTORY

Speculation in grain and future trading on the organized exchanges are fundamental market problems which interest every citizen. Unfortunately these questions are usually treated in a controversial manner, the discussions generally producing more heat than light. And so it happens that while the literature in this field is abundant, yet most of it is very one-sided and partisan. There are very few disinterested reports explaining the important terminal market problems of the grain trade.

This book is really a "report" on the Chicago Board of Trade, and particularly on the two big problems involved there, namely, future trading and speculation. I have endeavored to relate these two practices to the larger problem of marketing the grain crop, in order to show the true setting and the actual significance of future trading and speculation. In this way only can the economic functions of these two practices be rightly understood.

It is hardly necessary to add that I have tried to make this report fair and candid. I have written this book for those open-minded readers who are looking for a disinterested treatment of the subject. The reader who already "knows it all" or whose mind is finally made up on all these controverted points, is asked to close the book at this point and read no further.

In deference to the tacit demands of my readers to know what my credentials are for writing this report, I will add a brief word of explanation. The first twenty years of my

life I spent on a Kansas farm, and to this farm I have made a yearly visit during the past twenty years. Hence I claim to know something of the viewpoint of the farmer who is growing the grain. For several years I taught the subject of grain marketing in one of our State Universities, and so became familiar with the "theory" and with the literature of marketing. I made a first-hand study of the country elevator business and of the various terminal market problems, thus getting in touch with the "practical" side of marketing. Over two years' time was devoted to this study. Therefore, whatever the limitations of this book may be, whatever its merits or defects, it is the product of several years of study of the theory and practice of all parts of the grain trade.

JAMES ERNEST BOYLE.

Ithaca, N. Y.
November 12, 1919.

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I

FUNDAMENTAL ECONOMIC FUNCTIONS OF A MARKET

The marketing of grain has been considered, in all countries and in all times, as a matter of grave public concern. And in our modern times, the great central grain markets have reached an importance in the distribution of food supplies never attained before.

Before passing an intelligent judgment on the virtues and shortcomings of that particular grain market known as the Chicago Board of Trade, it is first necessary to form a standard of judgment as to what a market should be and should do. An ideal wheat market, for instance, would exist if exactly one fifty-second part of the world's wheat crop were harvested each week and if exactly one fifty-second part were marketed each week and consumed each week, and if the quality and quantity were always the same, the quantity merely increasing slowly and gradually to keep pace with increasing population, and if the price remained the same, and if every buyer of wheat and flour and bread paid cash. There would then be no credit problem, no storage problem, no grading problem, and, most significant of all, no price problem. But contrast this ideally simple wheat-market problem with actual conditions.

The first impressive fact to come to our notice is the lack of coördination between production and consumption as to the amount of wheat produced. Those peoples of the earth who eat the wheaten loaf—and supposedly pray for their "daily bread"—actually need about three and a half billion bushels of wheat per year. And, oddly enough, this was the crop actually produced in 1914. The year before and the year after, however, the crop was half a billion bushels in excess of that amount. And in the year 1916 the crop fell a billion bushels short of the 1915 crop. These years are typical of the wide range in crop yields. Insect enemies, such as the green bug, may work unexpected damage to a promising crop. So also may early frosts, drouth, hail, wet weather before harvest time, or wet weather during or after harvest, or red rust or black rust. Truly, the amount of good wheat harvested and marketed any year is very uncertain, depending as it does on many factors beyond the control of man.

Again, there is lack of coördination of production and consumption as to the time of production, of harvesting and marketing. While the world's wheat harvest is going on every week in the year—as a glance at the Table in Appendix 1 so interestingly shows—yet the bulk of the crop is actually harvested during the four months of July, August, September and October. And in the United States, which is one of the six great wheat exporting countries, over half the wheat crop is marketed within four months following the harvest.

The world's supply of wheat, in brief, is not produced when needed, where needed, and in the quantity needed. This makes the "Supply" side of the market very uncertain and very fluctuating. And the "Demand" side is subject to

unforeseen and unpredictable influences. A large crop of rye of good quality, for instance, in Germany or Russia—where rye bread is common—may increase the consumption of rye and decrease, proportionately, the demand for wheat. A failure of the corn crop may shift the demand to wheat products for feeding purposes, or conversely, a plentiful crop of corn, oats, alfalfa and of cotton seed may lessen the demand for bran and flour mill offal for stockfeeding purposes. A government attack on the high cost of living, or a statement from some prominent man that bread is too dear, may cause a big slump in the demand for wheat.*

The stubborn, underlying condition of the market of agricultural products is shown by the above facts to be the lack of coördination of production and consumption.

The fundamental problem of the market is, therefore, to move the whole crop into consumption without a loss, without a shortage, and without a carryover. And price is the instrument through which the market does this, or should do

* For a curious example of how unforeseen events may affect the market, see Appendix 9. The following facts concerning the Australian wheat crops of 1917–18 and 1918–19 are significant:

Grain Area, acres		*Yield, bushels*	
1917–18	*1918–19*	*1917–18*	*1918–19*
9,774,658	8,003,361	114,733,584	76,125,879

"Thus the area harvested for grain appears to have been 16 per cent less than in 1917–18, and the decrease in yield equal to no less than 33 per cent. The small yield to the acre is principally caused by the adverse character of the season. The reasons for the decrease in area are: Shortage and unreliability of labor; high cost of production, slow financial settlements by the pools, and the fact that stock raising is often thought to be more profitable than wheat growing."

(Vice Consul W. J. McCafferty, Melbourne, July 17, 1919. *Commerce Reports*, 1919, No. 214.)

this. If the market is a free, open, and competitive market, it makes the automatic adjustment of production to consumption. The high price (following a short crop) curtails consumption and stimulates production. The low price (following a large crop) increases consumption and curtails production. Thus the cure for high prices is high prices. The cure for low prices is low prices. Thus, in the open competitive market, a constant adjustment is made, coördinating consumption to production, on the basis of facts and not theories.*

Price Function.—It follows from what has been said above that the function of the market is to fix that price which will coördinate production and consumption. Such a price is sometimes called an equilibrium price or a fair price.

* No matter how careful a market expert may be in compiling statistics from all known sources in order to form a correct theory of market price, yet some omitted factors may emerge to bring those prices out of line with his theory and in line with the facts. An excellent example of this is seen in the case of the United States Food Administration during the years 1917 and 1918. Mr. Herbert Hoover, in charge of this gigantic task, was usually able to rely upon statistical information, secured by his experts, as to supply and demand matters. In one conspicuous case, however, he found himself in error, despite the wide range of his information. The price of hogs in 1917 had been set at $17.50. Farmers had been induced to increase their hog crop very greatly. The conclusion was reached, about the end of the year, to remove this government price. We have the testimony of Mr. Mark Sullivan (*Collier's Weekly*, August 16, 1919) that at this juncture Mr. Hoover was greatly perturbed over breaking faith with the farmer, fearing that the removal of the government price would be followed by a slump in price. Exactly the opposite thing happened. The price rose to new records and for many months remained high. The "bumper" corn crop of 1917, claimed by the Government Crop Report, proved in fact to be so poor and so largely wet and unmerchantable that there was, in reality, a very short corn crop.

It takes into consideration not merely supply, with its underlying cost of production, but also demand, which cannot be ignored in price matters. That cost of production alone is not a proper basis for fair price is evidenced by the fact that no two farmers have the same cost of production, and no one farmer has the same cost of production from year to year, and that the inefficient, high-cost farmer, like the inefficient, high-cost manufacturer fails and quits because he cannot force the consumer to pay the high price represented by his high cost of production. The equilibrium price pays the cost of production of that supply which the consumer stands ready to take at this price. If more than this is produced, the consumer can be induced to take it only by lowering the price, so that doubtless some portion of the supply is sold below the cost of production. That is, the so-called "marginal farmer" loses money on his crop this year, and puts his land in something else next year, unless he be following a fixed rotation scheme. Thus, in fact we do have an annual fluctuation in wheat acreage, corn acreage, and other crop acreage. Conversely, it is true also that if less than the supply is produced, which the consumer wants at the equilibrium price, the strengthened demand shows itself in higher price. Then the marginal farmer, the one on the ragged edge, finds his crop selling at a profit and he will feel like trying the same crop another year—unless he has a rotation program.

This discussion of price theory is given to remind the farmer that as a producer he is entitled to "cost of production plus a profit" only so far as the consumer is able and willing to use the goods at that price. In the end the consumer is, and ought to be, the power that directs ultimate production. For surely the purpose of production is con-

sumption. That the producers are beginning to understand the psychology of this situation is illustrated by the action of the organized livestock producers, and other producers, in running paid advertisements for the purpose of "educating the consumer" and "stimulating demand" for their various food products. The only "fair price" then, is the equilibrium price which coördinates production and consumption. This is the price which moves the whole crop into consumption, without a shortage, and without a carry-over.*

* The statement has gained much currency that the farmer is the only person who has no voice in fixing the price of his product. The manufacturer, according to this view, puts the price on his product. This is true—with certain very important limitations. Most manufacturers face competition. All manufacturers face the consumer. The manufacturer sets his price, let us say, at the outset. Then what happens? If he has competition, he must set his price not too far above his competitor. Suppose the consumers fail to buy his whole output at this set price? He has various alternatives: (1) lower his cost of production and lower his price; (2) stimulate consumption by advertising and selling campaigns; (3) improve his product; (4) quit business. A very large per cent of all manufacturers do, sooner or later, fail and quit business, because the consumer refuses to buy any volume of the output at the price "fixed" by the manufacturer. Every village of any size can boast of one or more of such failed factories. If the manufacturer have no competition, he is likewise forced to conform in the end to the consumer's demand. In reality, then, it is only superficially true that manufacturers "fix their own price" and hold the consumers to those prices. Similarly, we may say the merchants in the retail stores fix their own prices—with certain very important limitations. Goods accumulate on their shelves, dead goods, not movable at the "fixed price." Annual and semi-annual clearance sales, at cut prices, may move these into consumption. A very large per cent of the merchants fail, because their "fixed" prices failed to move a big enough volume of goods into consumption. Fixing a price, by ignoring the consumer, is merely naming a price that won't stay fixed. The colossal and over-

By the test of the economic function of a market we must judge the grain market in general, and in particular that part of the grain market known as the Chicago Board of Trade.

A careful study of the figures published by the United States Department of Agriculture giving the annual wheat production and the average farm price of wheat for the past fifty years shows clearly that the average price does actually fluctuate with the total supply of wheat. These figures are proof of the fundamental market truth that supply and demand govern prices in a broad and general way. Such figures, however, deal only with averages and for the whole United States, and must be construed with these limitations. They have value only for the big annual market movements.

A more specific test must be applied to the Chicago market, taking into consideration not merely the supply (which does not fluctuate sharply from day to day) but also the demand (which does fluctuate sharply every hour of every day). Select for this purpose ten normal years—free from war—and what are the results? The important factors on the supply side which affect the market day by day are these: arrivals on the markets; United States Visible Supply; United States Crop, as estimated by the United States Department of Agriculture, and by private crop reporting agencies, such as Snow, Inglis, Goodman, the railroads and the industrial corporations; the world wheat crop as reported by Broomnall of Liverpool, by the International Institute of Agriculture at Rome, and by other agencies, official and private. The demand side of the market consists of buying

whelming growth of advertising in recent years shows the determination in the mind of sellers to control the consumer by "educating" him.

orders, and is therefore influenced by such factors as strikes, riots, panics, food boycotts, popular campaigns against the high cost of living, important pronouncements by high public officials, important lawsuits (particularly against farmers' organizations), embargoes by railroads, car shortages, shortage of ships, drouth, failures of certain crops, etc. The demand side is the sensitive side of the market, showing the consumer's ultimate force in directing what shall be produced by deciding what shall be consumed. Applying this test of supply and demand to the Board of Trade wheat prices for the ten normal years, 1905–1914, we find that the daily prices do fluctuate in accordance with supply and demand factors. The figures on which this conclusion is based are given in Appendix 2 and 3.

It is fair to conclude, therefore, that the fundamental economic functions of a market are performed by the Board of Trade of the City of Chicago.

In speaking of supply and demand, some writers seem to take the stand that supply is an impersonal factor while demand is the personal, human factor. But the word "supply," in grain market language, must refer to the buyer's and seller's estimate or opinion of supply, and hence is, like demand, a personal, human factor. For surely no one ever knows exactly what the merchantable supply of grain is. Each dealer must keep revising his own opinions from day to day. This brings us to a very important limitation of the law of supply and demand. Within broad limits "supply and demand" do fix market price. But, the actual price at which the trade is made may be called the "bargain price." To use a figure of speech from the prize fighters' ring, supply and demand work out a circle: within this circle the buyer and seller contend for advantage and by their bargaining arrive at a price. The strength or weakness of the buyer or

of the seller thus enters into all price making. This fact has caused some very respectable thinkers to reject the whole law of supply and demand as inoperative. It is always operative, but it operates through human agents, some of whom are weak and some of whom are powerful. But should price fixing be attempted by government commission, the law of supply and demand would necessarily be followed as closely as possible, unless the consumers should be rationed. And to ration consumers in peace times would be a tacit recognition of the law of supply and demand. A price that is too low does not maintain production; a price too high does not maintain consumption.

What the cost of this Chicago market is to the public, as compared with the service it renders, what its mechanism is for functioning as a world market, and how its various problems of future trading, hedging, and speculation are actually being met, must be deferred for discussion to the subsequent chapters in this report.

II

CHICAGO AS A GRAIN MARKET

The geographical location of Chicago made of the city a great grain market. Here is the greatest railroad center in the world. Here is the head of the Great Lakes. And tributary to this city is an empire of the world's best agricultural lands. About 400,000,000 bushels of grain are received at Chicago each year.

It was due to natural economic evolution that here, the great grain warehouses were built, and that here should grow up the world's greatest cash grain market.

However, with the settling up of the agricultural empire adjacent to Chicago there grew up a number of powerful, competing markets, the chief of which are in the order of their importance, Minneapolis, Duluth, St. Louis, Kansas City, Milwaukee, Omaha, Peoria, Toledo and Detroit. The primacy in wheat, barley and rye passed to Minneapolis. However, the primacy in corn and oats remained with Chicago and the receipts of grain at Chicago are still double those of her nearest rival. Along with these large central, competing markets there grew up a large number of so-called interior markets, as is witnessed by the number of grain exchanges formed in recent years in these points. A partial list of these exchanges includes the following: Indianapolis Board of Trade, Little Rock Board of Trade, St. Joseph Grain Exchange, Atchison Board of Trade, Fort Worth Grain and Cotton Exchange, Louisville Board of

Trade, Memphis Merchants' Exchange, Topeka Board of Trade, Wichita Board of Trade, Salina Board of Trade, Hutchinson Board of Trade, Oklahoma City Board of Trade, Enid Board of Trade, Houston Grain and Hay Exchange, Denver Grain Exchange, Sioux City Grain Exchange, Superior (Nebraska) Board of Trade, Des Moines Board of Trade, Cairo Board of Trade.

The growth of interior flour mills in this same territory, has tended to check the flow of cash grain to the terminals. For instance, using the figures of the United States Census for 1909, we find that in the Chicago territory, there were then 2828 flour mills of an annual capacity of over 1000 barrels each, and actually grinding 315,000,000 bushels of wheat a year.* The State of Kansas alone, at that time, was grinding about 50,000,000 bushels of wheat a year, and since that date many new flour mills have been constructed in that State. Developments like this affect the trade in both cash grain and future grain on the Chicago market, as will be presently explained.

The increase in the feeding of livestock for the packing industry and the development of the manufacture of various kinds of cereal breakfast foods, of corn products, of livestock feeds, etc., have also tended to check the flow of grain to the larger terminals, and to promote the business of the small interior markets

To illustrate in a concrete manner how this competition among markets works, consider the following typical cases:

(1) A farmers' elevator in northern Iowa has a prosperous year's business, shipping out the almost unprecedented volume of one million bushels of grain. In the spring, it develops that too much corn has been shipped out, and some

* See Appendix 4.

large livestock feeder must buy corn. This farmer goes to his local elevator. This elevator manager has a daily price card from Minneapolis, from Chicago and likely from Peoria and other points. He knows what these markets are bidding for corn, also at what price they offer corn. This manager may turn to his telephone, call up a car lot grain dealer in Sioux City and ask for his price on corn. The Sioux City dealer, being in touch with country elevators in four States, and with a branch office in Omaha, is able to buy the grain direct from a country elevator and turn it over to the Iowa manager at a profit of a half cent a bushel. And hence the corn is bought through the Sioux City dealer. And there are hundreds of dealers of this kind, in the interior markets, in direct, daily competition with Chicago and other terminal markets. To attract the grain to Chicago the price must be large enough, evidently, to make it to the interest of the country elevator to ship to that market.

(2) A dealer in poultry feeds in Petaluma, California, wires his Denver grain dealer for a car of corn. This dealer wires a country elevator in Nebraska or Iowa for the corn, or, indeed, may wire an Omaha or Sioux City or Cedar Rapids dealer, who, in turn, gets in touch with the country house. In this way the corn is attracted to that market where the demand (the price) is the strongest.

(3) In the same way New England and the South—great consuming markets—are bidding for grain, in part through the large terminal dealers, in part direct to the country elevators through grain brokers and grain dealers of various kinds. The grain trade, as now conducted, it may be mentioned in passing, is carried on by many small, competing middlemen, with a small profit taken by each middleman, rather than by a few very powerful middlemen with a big

profit by each. This is the country shipper's guaranty of getting full market price.

With the increase in the number of primary and secondary grain markets, and with the growth of local grain consuming industries at interior points, the tendency is to lessen the area from which Chicago draws cash grain and to increase the area for which Chicago is a market for future trading in grain, both for hedging and for speculative purposes. A discussion of this point must be deferred, however, till we reach the subject of future trading in Part IV of this report.

III

THE CHICAGO BOARD OF TRADE

Viewed as a Piece of Market Machinery: Structure and Organization

A Corporation.—The Chicago Board of Trade, like all the other important grain exchanges, is a corporation. It was incorporated under a special act of the Illinois Legislature passed February 18, 1859. This act incorporated the then existing Board of Trade, which had had its early beginning in 1848 as a voluntary association. It was not till 1856, however, that the trade in grain was important enough to make the Board of Trade a real Grain Exchange.

Objects.—The objects of the Board of Trade are set forth in its Rules as follows:

(1) To maintain a commercial exchange.
(2) To promote uniformity in the customs and usages of merchants.
(3) To inculcate principles of justice and equity in trade.
(4) To facilitate the speedy adjustment of business disputes.
(5) To acquire and to disseminate valuable commercial and economic information.
(6) To secure to its members the benefits of coöperation in the furtherance of their legitimate pursuits.

The Board of Trade, as a corporation, does no trading. It owns a building. In short, it merely furnishes (1) a place to

trade; (2) rules of trading; (3) market information. The members acting as individuals, trade among themselves and as agents for many thousands of outsiders.

Membership.—The membership of the Board of Trade now (1919) numbers 1617. There is no limit to the number of members who may join.

The membership may be classified (1) as to place of residence, and (2) as to the nature of their business.

(1) There are 1198 members of the Board of Trade resident in Chicago. The remaining 419 are distributed as follows:

New York	131	Pennsylvania	11	Washington, D. C.	1
Illinois	71	Maryland	8	Arizona	1
Missouri	50	Michigan	8	Kansas	1
Minnesota	44	California	7	Virginia	1
Ohio	24	Tennessee	6	Florida	1
Canada	24	Kentucky	6	Colorado	1
Nebraska	18	Louisiana	5	Utah	1
Indiana	16	South Dakota	3	Oklahoma	1
Iowa	16	Arkansas	2	Oregon	1
Wisconsin	14	Texas	2	England	1
Massachusetts	11	Washington	2		

This distribution corresponds fairly accurately to the location of the larger terminal markets and to the important consuming centers.

(2) In classifying members on the basis of their principal activity, it must be borne in mind that such members are quite generally active in two or more lines of the grain business, and hence an effort has been made to list a member according to his chief activity.

About one-fourth of the membership are interested in receiving and selling consigned grain or in shipping cash grain: about one-fourth are primarily concerned with future

trading in grain (both speculative and hedging); about one-fourth are brokers who act as agents for others (and sometimes for themselves as principals) in doing the pit trading (future trading); the balance of the membership represents those interested directly and indirectly in grain or provisions. Banks, railroads, and steamship companies have 35 memberships in order the better to give attention to the financing and transportation of the grain. The great flour mills, the great corn products companies, the cereal breakfast food manufacturers, have memberships and represent heavy buying interests. All important Terminal Elevator Companies belong, and these too represent strong buying power. Exporters represent another group of buyers. Both the buying and the selling side of the market are well represented so that the market factors are present which go to make up a real auction.

One farmers' company which belongs to the Board of Trade is an export company of Canadian farmers, and does a very large wheat export business. A second farmers' company operates six or seven country elevators in Illinois.

CLASSIFICATION OF MEMBERS, CHICAGO BOARD OF TRADE, YEAR 1919

Cash grain trade	394	Seeds and miscellany	14
Future trading	393	Oats products	14
Brokers	385	Corn products	10
Terminal elevators	50	Railroads	10
Pit scalpers	48	Steamships	9
Packers	44	Salvage grain	8
Provisions	41	Line elevators	8
Feeds	35	Stockyards	1
Exports	27	Vinegar	1
Flour mills	24	Inactive	70
Banks	16		
Malster	15		1617

The Packers and Provision Dealers are represented, since there is one pit on the Exchange floor where there is future trading in Provisions (Pork, Lard, Short Ribs).

In the above list are included two farmers' companies, namely, Grain Growers' Export Company, Winnipeg (Thomas Crerar),—and the Plainfield (Ill.) Grain Company (Joseph A. Henebry).

The Pit Scalper, in the above list, is a person who trades for himself in the pit, and is in and out of the market on very small price fluctuations.

The Future Trading list of members includes the various firms in Chicago and elsewhere whose main business is to handle future trading orders for customers. In almost every case a Chicago firm executing future orders for a commission is also engaged in receiving consigned grain in carlots on commission. In fact, one distinguishing feature of the Chicago market is the large mingling together of the cash and the future business.

Private Wire Houses.—There are several large and influential firms operating leased wires, and these firms are generally called "private wire houses." Some of these firms have only one branch office; some have twenty or more branch offices; one of them has 40,000 miles of leased wires, stretching from Boston and New York to San Francisco, and from Winnipeg to the Gulf, and with "drops" in most of our large cities. Some of the private wire houses reach out into the small towns of the country. Some are engaged almost wholly in future trading: others feature the cash grain business. In the above list, the wire houses are listed under the heads of cash grain and future trading. A complete list of all wire houses connected with the Chicago Board of Trade is given in Appendix 6.

Membership—Qualifications for.—Any male person of good character and credit, of legal age, is qualified, under the Rules of Board, to become a member. Applicants for membership must first be indorsed and recommended by two members who stand sponsors for them, and must next be approved by the membership committee. The applicant's name is posted on the bulletin board for at least ten days. An unfavorable vote by three directors (out of 18), three "black balls," is then sufficient to shut out the applicant. Upon joining, the applicant signs an agreement to obey all the Rules of the Board of Trade, and he is held to be strictly bound by these rules, under penalty of suspension or expulsion and loss of his membership fee. Memberships are bought from retiring members or from the estates of deceased members, and cost, during the year 1919 from ten thousand to eleven thousand dollars. The price varies greatly from year to year.

Government of the Board of Trade.—The affairs of this corporation are managed by a Board of Directors of 18 members. The President is elected by the general membership for one year. The annual election is held in January. There are two vice presidents whose term of office is two years. There are fifteen other directors whose term of office is three years. Hence the President, one vice president, and five directors are elected annually.

As a self-governing institution, the Board's method of law making is very democratic. The initiative and referendum came into vogue here long before it became popular with our State governments. All rules are adopted by the members. And it is worthy of comment, that when it comes to a vote, the "small business" men outvote the "big business" men. In practice, the usual vote cast at an election is about 400 or

500—much less than half the membership. Since one-fourth the members are non-residents, it would seem just and wise to introduce a plan of voting by mail. A larger and more representative vote would then be secured.

Rules.—Under the charter of the Board it has power to adopt rules and to enforce them. Under this provision, there have gradually grown up, during the past fifty years an elaborate set of Rules, By-Laws, and Regulations, filling almost one hundred and fifty printed pages. The rules are easily changed to meet emergencies, such as war conditions. These rules give very great power to the Directors to discipline members. And the courts have repeatedly and consistently upheld this disciplinary control of members.

Administrative Work.—The active administrative work is largely in the hands of committees. A glance at the list of these committees shows the great number of important details with which the Board must concern itself in order to keep the market machinery running smoothly. At the outset we find two committees, provided for in the original State Charter, and the only committees which are elected by the membership at large. These are:

(1) Committee on Arbitration (10 members)
(2) Committee of Appeals (10 members)

The other more important committees (chosen by the President) are:

(3) Membership
(4) Warehouse
(5) Grain
(6) Clearing House
(7) Market Report
(8) Violation of Rules
(9) Transportation

(10) Weighing and Custodian
(11) Claims and Insolvencies
(12) To arrive grain.

Physical Equipment.—The trading room of the Exchange is a high-ceilinged room, 144 by 161 feet. The adjoining smoking room (no smoking is permitted on the trading floor) is 64 by 72 feet. In the trading room along the large east windows, there are 52 tables for displaying samples of cash grain, each table capable of accommodating four firms. In the case of the larger firms, of course, one table is used by one firm only.

To accommodate those engaged in future trading there are four circular "pits," with three or four steps leading down into the pit. These are the wheat pit, the corn pit, the oats pit and the provisions pit.

To accommodate those buying grain "to arrive" there is a desk where all bids are recorded and from which they are at once posted on the large blackboard.

The trading floor of the Exchange is provided with means of securing market information, rapidly and accurately, and of disseminating market information to all interested. There are 100 telephones and 150 telegraph instruments. Large blackboards display such information as the following: Exports of bread-stuffs at Atlantic and at Pacific ports: Cash Grain Market at other important terminals: Futures market at Minneapolis, Duluth, Winnipeg, Kansas City, St. Louis, New York: Visible supply of grain at Baltimore, Boston, Buffalo, and all other important markets, including also grain afloat at each terminal where vessels are loaded: Movement of grain—at Chicago— receipts by each railroad —shipments by each railroad: Daily receipts in Chicago warehouses and daily shipments from same: Inspection—

car lots, grades, etc., in Chicago. Several Tickers are on the floor, some giving price quotations, and some the so-called market gossip (*i. e.*, domestic and foreign news items of commercial and financial significance). There is also a large weather map, furnished by the United States Department of Agriculture, showing for each morning the country's weather (wind direction, precipitation, clear or cloudy, and barometer). This is supplemented by large charts giving precipitation for many shipping points in each grain-producing State.

The factors affecting either supply of or demand for grain are quickly noted and made public here. A strike of the Boston police for instance, is reported on the gossip ticker, and a depression is cast over the demand for wheat.

The important newspapers have representatives in the "press gallery"—a section near the Provisions Pit. They report the doings of the market to their millions of readers in any manner they see fit—so long as they don't spread market rumors, which is strictly forbidden by the rules.

This very brief catalogue of facts is intended to disclose in general outline what market machinery is comprehended under the term, "Board of Trade," and that this market machinery is under democratic rules of self-government.

With what degree of efficiency this machinery works must be discussed under Section IV of this Report, following.

IV

THE CHICAGO BOARD OF TRADE

Viewed as a Piece of Market Machinery: Operation and Functions: Sixty Years of Activity

A Continuous Market.—When the World War began in 1914, the commercial and financial shock was so terrific that all the world's stock exchanges closed their doors. The Directors of the Chicago Board of Trade paused for a moment and considered closing the Board, but decided against it. So the Board has a record of being open continuously, without a break, on every business day since it was incorporated. In other words, in any hour of any business day, in war or in peace, in prosperity or in panic, grain could be sold on the Chicago Board of Trade at a market value which was open and known to all men. What is the value of a continuous market to the man who has something to sell? It is impossible to state it in definite terms. The man who has been called on suddenly to sell a team of horses or a house and lot or a farm—things for which there are no organized exchanges—can doubtless appreciate both the promptness and the definiteness of organized exchange prices.

A Picture of One Day's Trading.—A cross-section of the Board of Trade market at work would present a true picture of its various related activities. The writer made a study of this kind, selecting a day in August, when the movement of wheat and oats to market was extra heavy, but the move-

ment of corn was extra light, thus getting a fair average day's business.* Before the details of this study are given, it is well to state in brief outline what actually takes place on the trading floor. Grain is sold in three ways, namely, (1) cash grain: (2) To arrive grain: (3) Future delivery, or grain "futures." The cash grain is in cars in the switching district of Chicago: it has been inspected by the State Inspection Department: official State samples are displayed in strong paper bags, each containing about a quart of grain and each bag with proper notation showing kind of grain, grade, dockage, and moisture content. These samples are placed on the sample tables of the commission merchants to whom the cars have been consigned. It is the chief business of the commission merchant to sell this grain to the highest bidder, and upon his success in performing this service depends the continued patronage of the country shipper. The term "to arrive," as used on the Chicago market, means time of shipment, not time of arrival (as on the Minneapolis market). To arrive grain is bought to be shipped, for instance, in 3 days, or in 10 days, or 20 days, or even in 90 days or longer, depending on local conditions. The bids are wired out or mailed out overnight to the country, subject to acceptance by the time of the opening of the market in the morning. Or bids are sent out during the day, subject to immediate acceptance.

Future trading is dealing in grain for future delivery, the regular delivery months usually being May, July, September and December. Future trading is of two kinds, speculative and hedging. A part of future trading is known

* The day selected for study was Monday, August 25, 1919. There was no future trading in wheat owing to the guarantee of wheat prices by the federal government.

as "hedging," and is a form of insurance, as explained later. A part of future trading is purely speculative. It is really dealing in grain contracts, rather than in grain. Some members of the Board of Trade devote their energies wholly to speculation, and are known as "professionals." Again, there is a sub-class of speculators who are called "scalpers," or "pit scalpers," since they buy, or sell, on each slight drop, or rise, in the market, trying to scalp a little profit off each fluctuation for themselves. They do not risk carrying any trades overnight but aim to be even at the close of each day. The "professional speculator," however, deals for the longer swings of the market, over a period of days or even weeks. A third class of speculators are the "amateurs" who send in orders for trades to be executed on a small commission. According to tradition, ninety per cent of the amateur speculators lose, and two years is the average market life of the amateur.

Bears: Short Selling.—The person who thinks the market price is too high and therefore is likely to drop, and who sells, expecting to buy later at a lower price, is called a short seller. He is "short" of the commodity he sells—that is, does not have it, but expects to be able to buy later at a profit. Of course the short seller believes the market will fall and wants the market to fall. He is therefore called a bear, and his selling is said to "bear the market." The man who has sold is called a "short."

Bulls: Longs.—About half the speculators, ordinarily, believe the market is likely to rise, and hence they buy, expecting to sell out later at a profit. Since they want the market to rise and believe it will rise, they are called "bulls," and their buying is said to "bull the market." The man who buys is called "long." It is obvious, that should there

be 100 traders in the pit, 75 offering to sell and only 25 bidding in same amounts, it would temporarily be a bear market—prices would decline. Conversely if 75 were buying and 25 selling in same amounts, it would be a bull market. In such a case the shorts (the bears) might take fright at the rise in price, foreseeing their profits wiped out—and possible loss accumulating—and begin to "cover," that is, buy to cover the amount of their sales. When such a situation develops, it gives opportunity to the "bulls" to sell out their purchases at a profit which, in effect, puts them temporarily on the bear side of the market. Thus each fluctuation of the market is a signal of activity to both bulls and bears.

Overbought: Oversold: Liquidated: "Technical position".—The market, in trade language, is called overbought when the speculators have bought all they can or care to, with the short interests temporarily eliminated. It is oversold when the traders have sold all they can or care to, with longs well out of the market, for the time being. When the longs have sold out as much as possible the market is said to be liquidated. The "technical position" of the market is said to be weak when "after a sharp upturn due to buying by discouraged shorts, new purchasers show a disposition not to buy except at considerable concession in price, and when the remaining short interests in the market is a hedging interest that is not likely to be disturbed by market actions in either direction; or the technical position may be said to be weak when buyers, who have followed an advance, have found their buying insufficient to absorb the offerings and have witnessed a decline to a point near which they wish to stop their loss, new buyers not appearing in sufficient volume to prevent further decline. In such a case they would expect to find stop-loss orders in the market

which if encountered because of further decline, would be likely to bring about a sharp break until the holdings so liquidated are thoroughly digested at a lower level."

Margins.—Trading in futures is sometimes called margin trading, because at the time of the purchase (or sale) of the commodity only a small installment of the price is advanced. Under the rules of the Board of Trade a ten per cent margin may be called. That is, a person buying 5000 bushels of wheat at $1.00 a bushel, for future delivery, could be called for $500. And the same amount could be called from the short seller of 5000 bushels at $1.00 a bushel to protect the trade. The reader will bear in mind, at this point, that margin trading is the system now in vogue in real estate, and the system which has been in vogue in real estate for several hundred years at least. The margin system of buying, although called by various other names, is common in buying a large per cent of the articles advertised in our monthly magazines. In protecting contractors' bids on city, State, and Federal contracts, governmental authorities uniformly require the bid to be accompanied with a "margin." Margin trading is not peculiar to grain exchanges, but enters into the business life of the nation at many points: Like the credit system as a whole (of which it forms a part) it seems to be increasing in use as a modern convenience in conducting business.

One Day's Market.—On the day selected for study of the day's trading (August 25, 1919), there were 2595 persons, living in over half the States in the union, who executed trades on the Chicago Board of Trade. These were persons acting as principals, trading either directly or through agents on the floor of the Exchange. Of this number of persons, 1083 were buyers or sellers of cash grain; 36 were buyers

or sellers of to arrive grain; 1476 were buying or selling future contracts. The cash grain was mostly wheat; the futures were corn and oats, with an insignificant amount of rye. The cash grain sold was 1220 cars (approximately 1,830,000 bushels); the to arrive was 72 cars (approximately 108,000 (bushels); the futures amounted to 36,686,000 bushels.

Analyzed in greater detail, the following facts are significant:

Shippers of the cash grain to the Chicago market numbered 752, living in ten States, ranked in the order of their importance as follows: Illinois, Iowa, Indiana, Missouri, South Dakota, Minnesota, Wisconsin, Michigan, Nebraska, Wyoming.

There were 331 buyers of this grain representing nine States as follows: Illinois, Ohio, Michigan, New York, Massachusetts, Pennsylvania, Indiana, New Jersey and District of Columbia. The buyers are classified as follows:

Terminal Elevators in Chicago	69 per cent
Shippers—chiefly East and New England	12 " "
Millers, Feed Manufacturers, Industries	16 " "
Exporters	7 " "

"Scalping" of cash grain has no place on this market, the cash grain passing directly on to a consumptive buyer in practically every case.

It is impossible to classify future trades as between "hedges" and "speculative trades." Futures for the day are therefore classified on the following basis:

Volume sold (and bought) for September delivery	3,958,000 bu.
" " " " " December "	27,534,000 "
" " " " " May "	5,194,000 "
Total Futures	36,686,000 bu.

Number of sellers, 1414

Located in following 28 States, ranked in order of importance:

1. Illinois	8. Oklahoma	15. Michigan	22. Louisiana
2. New York	9. Iowa	16. Montana	23. Kansas
3. Missouri	10. Nebraska	17. Colorado	24. Maryland
4. Minnesota	11. Indiana	18. Oregon	25. Pennsylvania
5. Canada	12. Kentucky	19. Wisconsin	26. Washington
6. Ohio	13. Tennessee	20. Alabama	27. Arizona
7. California	14. Massachusetts	21. Mississippi	28. Virginia

Number of buyers (including above sellers) 1476.

Located in following 28 States, ranked as above:

1. Illinois	8. California	15. Colorado	22. Alabama.
2. New York	9. Michigan	16. Tennessee	23. Louisiana
3. Missouri	10. Nebraska	17. Virginia	24. Massachusetts
4. Iowa	11. Canada	18. Mississippi	25. Kansas
5. Minnesota	12. Kentucky	19. Washington	26. Maryland
6. Indiana	13. Wisconsin	20. Oregon.	27. New Hampshire
7. Ohio	14. Oklahoma	21. Montana	28. Pennsylvania

A glance at these figures shows that the producing centers and the consuming centers make up the volume of the trading in futures. The "amateurs" furnished about twenty per cent of the volume of futures, the balance coming from professionals and scalpers. On this day sixty per cent of the amateurs were bulls—took the buying side. The amateur's vision sees when the price is too low and it is profitable to buy. It is commonly said, however, that his vision does not also see when prices are too high, and it is time to sell, and that is the reason he is an amateur.

The figures showing these facts are as follows:

	Bought, bushels	*Sold, bushels*
Members trading for themselves........	18,402,000	20,010,000
" " " other members.....	9,664,000	10,802,000
" " " non-members......	8,620,000	5,874,000
	36,686,000	36,686,000

What "toll" does this market collect for its services? The cash grain business is governed by fixed rates of commission, which are substantially the same in all markets, namely, one per cent commission, *i. e.*, one cent on each dollar's worth of grain sold. Future commissions are also fixed by the rules, and are at present one-fourth of a cent per bushel for the "round turn," that is, for both buying and selling. In other words, for buying 5000 bushels and selling 5000 bushels, the commission is $12.50. The broker, who enters the pit and executes an order for a house dealing in futures is entitled to a brokerage of 75 cents for 5000 bushels. This is paid by the house, not by "the country." It will be noticed that 52 per cent of the trading in futures is done by members for themselves, on which there is no commission charged; 28 per cent is done by members for other members, at half rates. So the "toll" for the day's trading in futures can easily be calculated.

Members trading for themselves............	$ 0.00
" " " other members.........	12,791.25
" " " non-members..........	18,242.50
Total..................................	$31,033.75

In other words, the commissions on one day's future trading, 36,686,000 bushels, is $31,033.75. On the same basis, the volume for one year would be 11,005,800,000 bushels and

commission of $9,310,125. These figures cover trading in corn, oats and rye. As mentioned before, during the period of the government guarantee of the wheat price there was no future trading in wheat.* The corn and oats crop of the country usually average somewhat over 4,000,000,000 bushels, and the Chicago market is used for hedging the crop as it passes from producers into final consumption. The "toll" on the whole crop imposed by future trading is $\frac{9}{40}$ of a cent per bushel, or slightly under $\frac{1}{4}$ of a cent a bushel.

The use of a future trading for hedging is described below, and the general theory of speculation and hedging in the last chapter.

The commissions on the cash grain for the day, at one per cent, are calculated to be $30,500.

Selling Cash Grain.—The samples of cash grain are distributed on the proper tables by employees of the Board, early in the morning. Trading begins at 9:30. The first hour is spent largely in feeling out the market. During that time the one or two hundred men representing the buying and the selling interests circulate cautiously among the tables, getting a mental inventory of the amount of grain arrived for the day and the general quality and condition of it. By 10:30 active selling begins. The chief sellers are, of course, the commission merchants—about 100 in number—who handle the consigned grain. Rules forbid them to be both principal and agent in the same transaction. Hence grain consigned to them must be sold by them in the open market. The buyers are chiefly the following interests: terminal elevators, shippers to eastern mills, particularly New England and New York, flour millers, manufacturers of corn products, rolled oats, breakfast foods, cereals, etc., malsters,

* August 25, 1917, to Fall of 1920.

feed manufacturers, and exporters. The market is a highly competitive one in every sense of the term. The commission merchants use all the arts of the trade, taught them by years of experience, to secure the best prices for their patrons. They know what buyers prefer particular kinds of grain—which one white corn, which yellow or mixed; which want standard oats; which mill oats; which white oats. They know where to go for a premium on the choice grain; where to find a buyer for low grade and "rejected" grains. The buyers in turn, feel back of them the pressure of the consumers' demands. If the "seaboard" is taking shipments freely, they buy more freely. If New England overnight places strong bids, that tones up the market. If arrivals continue heavy a few days without a corresponding strengthening in demand, prices work lower. If arrivals slacken for a time, and demand holds up, prices work upwards. Back of the arrivals there is the visible supply to affect the market, and back of the visible the grain afloat on the Lakes and in passage on the ocean, and back of that the more remote and fundamental factors of acreage, crop conditions, weather reports, etc. By "visible supply" is meant the grain stocks in public and private terminal elevators at all terminal markets.

The commission merchant, who is the agent of the country shipper on the market, performs certain definite services in addition to the major service of selling the grain. (1) He gives attention to the grade of the grain, and calls for reinspection in case his own private inspection satisfies him that a reinspection would raise the grade. (2) He combats the evil of car shortage by doing all in his power to secure cars for his shippers. (3) He files and pushes all claims for shortage and damage of grain in transit. (4) He finances

the country shipper to a very liberal extent by making advances against the bills of lading. When it is recalled that the bill of lading arrives by mail many days, and sometimes many weeks ahead of the grain, this service will be better appreciated. One Chicago commission house thus had outstanding at one time over $800,000 advanced against bills of lading, this money of course being borrowed by the commission house from the banks; another Chicago house had out over $2,000,000. (5) General protection. In the evolution of the Chicago market as described in the following pages—the country shipper was for many years under the heels of a monopoly, from which position he was finally extricated, in part by his own actions, in part by the help of the commission merchants of the terminal market.

The commission merchant, after selling a car of grain and getting the official weights and the money due on it, remits to the shipper the proceeds due him as shown by an "account sales" which always accompanies the check. This document is supplemented by certain trade documents, such as seal record of the car, weighmaster's certificate, etc., so that the shipper is protected from fraud from his commission merchant, even should his commission merchant attempt such a thing. It is a significant fact that the various disclosures in recent years of peculations and swindles by commission merchants refer almost wholly to the commission merchants in the unorganized markets, particularly produce, such as potatoes, cabbage, poultry, eggs, butter, and so on. The organized grain exchanges have done big work in making strictly honorable the business of a commission merchant. Any complaint of fraud coming to the Board from a country shipper is promptly looked into, and settled strictly on its merits.

The words "trade documents" convey to the casual reader but a faint impression of the significance of these trade instruments. No other market has developed these means of protection to the country shipper to the extent that the grain trade has. There is accordingly given in appendix 20 of this book (page 238), a very interesting set of these trade documents, showing the actual "life history" of a car of grain as it travels from an Iowa country station, to the Chicago Commission merchant, and on to the final buyer. The important functions of weighing, inspecting and grading are protected by every reasonable safeguard. Over twenty separate documents are exhibited, showing how full and complete is the information given on every step of the transaction. These "exhibits" show the large extent of the purely mechanical detail involved in taking care of the country customer's interests, and yet for the expert selling service and for all this routine of detailed service, the commission merchant receives one per cent as his margin of cost. In case the commission merchant is employed to buy or sell the grain for future delivery, or both buy and sell, his charge is only one-fourth of a cent a bushel.

Low Margin of Cost.—Grain is handled by the "middlemen" on the organized Exchanges for the lowest margins of cost of any commodity. In most forms of merchandising a five per cent margin is looked upon as a very low charge. The largest automobile works in the country, famous for its efficiency in cheap distribution of cars, allows its agents 15 per cent for selling. The margin on dry goods is said to average 19 per cent. The California Fruit Growers' Exchange found that the average margin taken by the jobber in distributing the oranges from the Growers' Exchange to the retailer was 8.4 per cent, and very little risk was involved

on the part of the jobber; the retailer, in turn, took a margin of 29 per cent. The fact that grain is handled at 1 per cent —the lowest margin of any farm product—is due to the evolution of the present grain exchange with its coördinated and interrelated system of cash and future trading.

The subjects of speculation and hedging claim a good share of attention by those who discuss the Chicago Board of Trade. The discussion of the subject of speculation forms an important portion of this book. At this point, however, the discussion must be limited to hedging.

Hedging.—Hedging is a form of insurance against loss through price fluctuations. In its simplest form, a person who has bought grain may hedge by selling an equal amount: conversely, a person who has sold may, for protection, buy an equal amount. In other words, a person who is neither long nor short is running no risk; he is hedged. To make concrete these two forms of hedging, consider the following typical cases:

(1) A country elevator in North Dakota is buying the farmers' grain and paying cash for it. This grain cannot be put on the Minneapolis market for two weeks: or in case of the usual car shortage prevailing in recent years, not for several weeks. If the price rises, the manager will make money for his company; if the price falls, he will lose. To stablize his business, to keep his business margin of profit narrow and safe, in short, to protect himself, he will hedge in the Minneapolis pit by selling as much as he has bought. He will sell for future delivery. Some speculator or industry will be willing to buy. When this hedged grain reaches the market and sells for cash, the hedge is bought back in the pit. When grain is thus hedged, the manager has no further interest in market fluctuation, whether the price rises or

falls, since he has both bought and sold, and will gain as much on the cash as he loses on the future, or vice versa. In this simple case the car of grain has been bought and sold once in the pit. The smallest lot which can be hedged is 1000 bushels. The expense for hedging 5000 bushels, round turn, is $12.50, a fairly cheap insurance. A fluctuation of one cent a bushel would mean $50 on the five thousand bushel lot—a risk which most managers cannot afford to take—and which the farmer himself, if he knows it, does not care to have shifted to his shoulders in the form of wider margins taken by the country elevator.

If the car of grain above noted had been sold to a Terminal Elevator—as it likely would be, the Elevator would in turn hedge by selling a future against it. Thus the 5000 bushels of wheat would be sold twice over in the pit, in the way of legitimate hedges.

(2) The second general type of hedging is represented by the flour mill which has made a contract, for instance, with a large bakery company, agreeing to deliver 2000 barrels of flour a week for the next six months, at a specified price. This will require 234,000 bushels of wheat—much more wheat than the largest flour mill cares to carry in stock. In such a case the mill goes into the future market and buys wheat to offset the flour sold, and is thereby hedged. The usual milling profit is assured, and the mill does not speculate on price changes. While most flour mills buy in the pit, very few ever take deliveries on their future contracts. They buy the cash wheat from day to day, from the samples on the tables, which suits their particular milling demands. As fast as they buy cash wheat, they sell an equal amount of futures. Thus their future contracts are sold out, that is, passed on to others who either want to speculate in wheat

contracts or to take the grain when delivery time comes. Thus it comes about that the same wheat may be hedged three times in the pit. It is obvious, therefore, that only a small part of the grain traded in the pit is actually delivered, although each transaction is an unconditioned contract to deliver. The contract itself is sold, or passed on, till it reaches its final hands—the man who wants the grain, or the speculator who settles it by paying or receiving the balance due on it.

These two general types of hedging transactions illustrate also the relation of hedging to speculation. There are not at all times enough cash grain interests in the market to absorb the hedging transactions, hence this function falls in part on the professional speculator and on the amateur speculator.

The sellers of futures in the pit, for hedging purposes, are, in addition to the country elevators, the following: line elevator companies, terminal elevators, buyers of to arrive grain, and farmers. Farmers are mentioned in this connection because in certain sections of the country, particularly Illinois, Iowa and North Dakota, a large number of farmers now use the machinery of the grain exchange. This was strikingly illustrated just after the World War, particularly in the fall of 1919—the period being one of great business unrest, due to widespread labor strikes, government suits against the "Big Five" Packers, and government propaganda against the high cost of living. As a result of these and various other factors the price of corn began to fall in August and registered a heavy and steady decline during the next sixty days. Many Iowa and Illinois farmers, with their corn crop assured, sold for December delivery in the Chicago pit. In this manner they made effective their own market

opinion, and secured the price for their corn which suited them best.

On the buying side of the hedging market are flour mills, shippers, exporters, the industries using grains, etc.

It will be borne in mind that the buyers of hedges become later, sellers in the pit, when the hedges are closed out. Likewise the sellers of hedges above described finally become buyers, when their hedges are bought in.

The question may be asked, how is grain hedged that is not subject to future trading? The answer is very simple. It is handled on a wider margin. Where wheat is handled on a one-cent margin, barley is handled on a three-cent margin. The farmers thus bear this additional two-cent margin, by receiving a smaller price for the grain. Hedging in the pit costs one-fourth of a cent a bushel.

If we may rely upon the various published investigations as to the "middleman's toll," the cost of moving grain from producer to the consumer is lower than the cost of moving any other standard food product. This low cost is directly related to the methods of handling grain on the organized exchanges, and particularly to the process of hedging on a wide, open market.

This whole matter is better understood after looking at the background of our grain marketing, and seeing through what evolution it has passed.

Evolution of the Board of Trade.—A careful study of any commercial institution generally shows that its roots go deep into the past, and that it is largely the product of a natural evolution, the "survival of the fittest" among commercial usages and customs. This is true of the Chicago Board of Trade, for, like Topsy, it "just growed." Beginning as a voluntary association of a few business men, it was at first

merely a sort of headquarters for anybody interested in local and general commercial and financial matters. It was not a market. In fact, at the early meetings much attention was given to the fundamental economic issues of transportation and banking, both of which institutions were sadly inadequate in the fast growing village. As railroads were secured, superseding the canal and supplementing the lake, and as a sound banking system was painfully achieved, the Board narrowed its interests primarily to market problems. The first Preamble to the Board's Rules stated the objects of the Board in these terms: "Having a desire to advance the commercial character, and promote the manufacturing interests of the City of Chicago. . . . " and so on. However, in seeking to reform the wildcat banking system prevailing before the Civil War, the Board found considerable opposition. A sound banking scheme was submitted to the State Legislature, in the form of a General Banking Act, but so violent was the opposition encountered, particularly from farmers, that the measure was dropped. The early historian of the Board states that "Farmers as a class lent a willing ear to the misrepresentations so industriously circulated by certain newspapers."

The Board, as stated above, gradually narrowed its activities to current market problems. Various articles came to be traded in, among which were the following: flour, grain, dressed hogs, lard, hides, high wines, whisky. By 1856 the Board had become a Grain Exchange, plus trading in so-called provisions—salt pork, lard, short ribs. The various important historical features of the Board are best taken up for discussion, one by one, in topical order.

(1) **Membership.**—When the Board began as a voluntary association it was open to "members and strangers

introduced by them." This western hospitality to strangers, however, was found incompatible with the Board's avowed purpose of "inculcating just and equitable principles in trade, establishing and maintaining uniformity in the commercial usages of the city. . . . and avoiding and adjusting, as far as practicable, the controversies and misunderstandings which are apt to arise between individuals engaged in trade when they have no acknowledged rules to guide them." The present set of rules attest the high ethical code of commercial conduct imposed upon the members of the Board. And since only members could be controlled by the rules, it quite early became necessary to limit trading on the floor of the Exchange to members only. The "stranger" who wishes to trade must trade through the member in good standing. No discrimination is made against farmers' companies seeking to join.

(2) **Weighing, Inspection, Grading.**—"The development of the system of grading and of elevator receipts is the most important step in the history of the grain trade," says Emery, the recognized American authority on that subject.* And the Chicago Board of Trade, in pursuing a policy of enlightened self-interest, has contributed more than any other one factor to the growth in America of standard weighing, inspecting, and grading systems for grain. In the original charter of the Board, we find this important grant of power:

"Section 10. Said corporation shall have power to appoint one or more persons, as they may see fit, to examine, measure, weigh, gauge, or inspect flour, grain, provisions, liquor, lumber, or any other articles of produce or traffic

* Emery, H. C., *Speculation on the Stock and Produce Exchanges of the United States*. p. 38

commonly dealt in by the members of said corporation; and the certificate of such person or inspector as to the quality or quantity of any such article, or their brand or mark upon it, or upon any package containing such article, shall be evidence between buyer and seller of the quantity, grade, or quality of the same, and shall be binding upon the members of said corporation, or others interested, and requiring or assenting to the employment of such weighers, measurers, gaugers, or inspectors; nothing herein contained, however, shall compel the employment, by any one, of any such appointee."

The system of handling grain in America by the measured bushel, instead of by weight, continued many years after its unwisdom was generally recognized. The writer recalls very vividly the time when as a boy he used to "hold sacks" at the thrashing machine, while a man carefully lifted the overflowing half-bushel measures of wheat, past the registering meter, and poured them into the grain sack. How awkward, how expensive, how inaccurate the process! And sometimes the farmer measuring his own grain would forget to click the meter (the black sheep in the grain trade are not *all* "middlemen"). The modern thrashing machine dispenses with this man and this boy, and measures its own grain by weight.

When the Chicago Board of Trade began to load Lake vessels by weight, it encountered opposition from both Buffalo and New York. But in the end this reform was forced on the eastern markets, and led to the present uniform system of the grain trade of selling by weight.

The Weighing Department of the Board of Trade is now one of the important parts of the Board, comprising about 150 persons, and representing an annual expenditure for all purposes of about $300,000. Approximately 600,000,000

bushels of grain are weighed (receipts and shipments) each year. The weighing charges are fixed by the Board and vary with the character of the service performed, ranging from twenty cents per thousand bushels for weighing in and out of vessels, to from fifty cents to two dollars per car for grain in bulk, depending on location. Chicago weights are now accepted universally by the grain trade as standard. To the country shipper of this grain this means a protection in all cases of filing claims for shortage against transportation companies.

Inspection and grading came up for discussion at the first meeting the Board ever held. Inspectors of fish and provisions were appointed—an important step at that time towards securing uniformity in grades and in guaranteeing quality.

Grain inspection was foreshadowed in an article in the *Chicago Democrat* of October 11, 1843, quoting these words from the *Buffalo Economist:*

"We all know its good quality (*i. e.*, Chicago wheat), but there is some poor raised there too, and some farmers are less careful than others to keep their grain clean. If good and bad, sand and clay, are all thrown into a vessel's hold together, it cannot be very satisfactory to those who buy the cargo for clean wheat"

And to this the *Democrat* adds,

"There can be no doubt but the course of our merchants and forwarders in mixing various kinds of wheat has injured our farmers much by keeping prices down."

The story of grain inspection in Chicago is too long a story to tell here, and hence only its outlines can be sketched, from the time the Board of Trade made the beginning of inspection, till the State of Illinois took it over and estab-

lished it under Civil Service rules. And the long struggle by the Board for effective inspection forms part of its greater and longer controversy with the railroads and terminal elevators for satisfactory warehousing of grain and the correct method of dealing with warehouse receipts.

As early as 1851 we see evidence of the forthcoming fight. At that time a petition was circulated among the produce dealers praying the Legislature to pass an Act "prohibiting any railroad company from engaging in the storage, commission or produce business," and expressing the fear that the Railroad is planning to "extend to this city a gigantic monopoly," which "said company has established in a neighboring state and city."

Railroads quite naturally built terminal storage at first, in the absence of existing terminal warehouses. In the absence of public regulation of railroads (the Interstate Commerce Act was not passed till 1887), and in accordance with business ethics and business standards of the day, certain serious abuses were developed by the railroad, in handling their part of the grain trade. These serious abuses largely connected themselves with the Terminal Elevator problem, and particularly with the granting of rebates and privileges to terminal elevator owners or lessors.

The Board began its inspection and grading activities at the very outset, before the power was formally granted to it by the Charter of 1859. Thus, in 1856 the Board passed a resolution, saying, among other things, "also that the Standing Committee be directed to embody in the agreement with the proprietors of grain houses anything that in their opinion will promote open, straightforward, fair dealing." In 1858 grain grades were formulated anew, and for the first time the test weight per measured

bushel was introduced. Thus began a new era in grain inspection.

The President of the Board at this time, Mr. Julian S. Rumsey, was a vigorous advocate of reform. Against his reëlection a campaign was waged by the warehouses and transportation interests opposed to strict enforcement of the inspection rules. He was reëlected, showing how the majority of the Board stood on this question.

The minutes of the meetings of the Board of Directors from this date or till the election of Hiram Sager as President for a second term in 1908, are the story of continuous and sustained effort by the majority to compel a powerful minority to observe open and fair methods of business in dealing with the public and with their fellow members. Apparently, by 1908, the majority had won its victory. This is an indication of how vital a matter weighing, inspection, grading, and warehouse receipts are understood by the Board to be.

In 1861 the Board was stirred by general complaints of laxity in inspection and of fraud on the part of the terminal elevator owners. A committee reported on this subject early in 1862, recommending that all grain bagged on the track should be refused admission to the regular warehouses, and that the names of any members guilty of frauds should be posted on the bulletin board together with a statement of the facts of the case. The members adopted this report, and the warehousemen pledged themselves to observe the new rules. However, complaints continued. There were charges of mixing grain, unfairness, discriminations and fraud in connection with grain warehousing.

The tense situation was summed up by the *Chicago Tribune* (of January, 1867) in these words:

Facts, charges, surmises and suspicions show that, as at present conducted, the grain trade of the Northwest is demoralized. It abounds in abuses which vex and defraud every honest dealer, and inflict great harm upon our city. We think the question is a proper one for our Legislature to consider, and we are in favor of legislative enactments, whereby these evils shall be mitigated if not entirely removed. First, let the Legislature pass a law compelling all railroads to give a specific receipt for the number of pounds of grain shipped in bulk. This will determine where the leakage is if there be any. Second, compel the railroads to deliver grain at any warehouse specified by the shippers, if there be a railroad track to it, whether the same belong to it or any other railroad. This will break down the monopoly which now exists, and open up the elevator business to competition. Third, adopt a uniform grade of inspection throughout the state making weight one of the essentials and taking for a basis the grades adopted by our Board of Trade, which may be vested with discretionary power to change the same, when the nature of the condition of the crop demands it. Fourth, the railroad agents who receipt for the grain on the cars to specify the grade in the receipt. If legislation can reach the evils complained of, this is the way to do it, and no honest man can object to such a law.

The present accepted idea that a public grain elevator is a public utility and hence subject to public regulation was of course not in force at the time of the early struggle of the Board with the warehouse problem. Not till the new Illinois Constitution of 1870 made the warehouses subject to public regulation did the warehouses definitely assume the legal status which they now hold. The Board of Trade, at its meeting July 1, 1870, passed a resolution urging all members to work and vote for the new constitution.

The Board of Trade Inspection service at this juncture received a black eye from which it never recovered. In the year 1870 a cargo of grain was inspected out for Buffalo and

was graded as No. 2 oats under the Board inspector's certificate. This cargo contained a mixture of 27,700 bushels No. 2 white oats and 8000 bushels of barley (part No. 3 and part rejected). The Board had a trial in the matter and removed the inspector and suspended a director who was a member of the inspection committee. However, in April, 1871, the State of Illinois passed the famous Warehouse Law, taking inspection of grain out of the hands of the Board, and placing it in charge of the Railroad and Warehouse Commission, where it has since remained. In 1916 the United States Congress passed an Act providing for federal supervision of the existing inspection systems of the country, and providing for federal grades for grain.

The weighing of grain by the Board of Trade of Chicago was not disturbed by the 1871 Warehouse Act. The Board of Trade also continues to take samples of grain from cars in Chicago, for purpose of comparison with state samples, in order to determine whether or not reinspection should be asked for. The State reinspects samples upon formal request. Appeals may be taken from the state inspector to the federal grain supervisors.

Captain Charles H. Taylor, the historian of the Board, sums up its work in this field as follows:

"The epoch-making requirements for the grading, weighing, storage and shipment of grain in bulk, which were adopted early in the Board's history, and contributed so largely to its supremacy in this department of commerce, were prompted by this motive (fair dealing), and the same is true of the long fight to compel railway companies to discontinue the practice of granting unfair freight rates to certain favored shippers."*

* Taylor, Charles H. (Editor) *History of the Chicago Board of Trade.* 3 Vols. Vol. I, p. 6.

(3) **Cash Grain.**—Little need be said about the evolution of the cash grain business, except the successful work done by certain individual members of the Board in helping break the monopoly in the country elevator situation. All thoughtful persons who are familiar with the history of the grain trade in the United States know that the country elevators, particularly in the States of Illinois, Iowa and Nebraska, prior to the year 1901, were in the grip of a monopoly which fixed prices. The price fixing was done through the organization of grain elevators known as the State Grain Dealers' Association, but in which organization a few powerful terminal houses—either terminal elevators or line elevator companies or both—completely dominated. Thus, in Nebraska, the State was mapped and divided into thirteen districts, as a basis of price-fixing. In Iowa the price-fixing was done through the Secretary with his head office in Des Moines. Any man or woman starting an independent elevator was forced to pay the so-called "regular" price, or be driven out of business. Farmers, sensing the situation and resenting it, began to build farmers' elevators. The organization declared them "irregular" and took steps to force them to behome "regular" or give up their existence.

An interesting sidelight on this situation is contained in a certain volume of testimony taken by the Interstate Commission, in the year 1906, on the Relations of Common Carriers to the Grain Trade.

The following quotation is from the testimony of Mrs. Kate A. Kehoe of Platte Center, Nebraska, who had endeavored to continue the operation of a country elevator and implement business after the death of her husband.

Mr. Marble (for the Commission): You refused to buy sometimes?

Mrs. Kehoe: Very, very frequently.

Mr. Marble: You maintained yourself with the implement business?

Mrs. Kehoe; Yes; when I could not handle the grain business at a margin, I let it go.

Mr. Marble: If you had been dependent on the grain business for a living could you have remained in that town?

Mrs. Kehoe: No, sir.

Mr. Marble: Did you have difficulty in getting a market for the grain you bought?

Mrs. Kehoe: At one or two special times I did. That was when the grain dealers' association was in force. I did not belong to it.

Mr. Marble: What difficulty did you have?

Mrs. Kehoe: I would not receive the offers or bids.

Mr. Marble: No one would bid for your grain?

Mrs. Kehoe: No.

Mr. Marble: No one at all?

Mrs. Kehoe: At one particular period I got all my prices from Chicago by wire.

Mr. Marble: You depended on the Chicago market?

Mrs. Kehoe: Yes, sir.

Mr. Marble: And could not get bids from Omaha?

Mrs. Kehoe: None at all.*

It should be added in this connection that this happened before the Omaha Grain Exchange was established, and that the leaders in this fight on "irregular" houses were also opposed to the organization of a Grain Exchange at Omaha.

In the same hearings conducted by the Interstate Commerce Commission, Mr. E. G. Dunn of Swaledale, Iowa, a

* Testimony taken by Interstate Commerce Commission, October 5–November 23, 1906, in matter of *Relations of Common Carriers to the Grain Trade*, 59th Congress, Second Session. Senate Document 278, Washington, 1907.

traveling solicitor for the firm of Eschenburg and Dalton of the Chicago Board of Trade testified that the Des Moines Secretary of the Iowa Grain Dealers' Association had put out a letter condemning the Eschenburg and Dalton firm for supporting farmers' elevators, and asking the "regulars" of Iowa not to consign grain to this firm. The firm of Eschenburg and Dalton was an old, well-established firm of cash grain receivers, and could ill afford to risk their patronage. Nevertheless they stood by the few farmers' elevators that had started in business. The attack on this firm's business, testified Dunn, caused its list of Iowa customers to shrink from 200 to 3. Faced with this emergency, the firm began a vigorous campaign of organizing more farmers' elevators throughout Iowa. Mr. Dunn, who had considerable force as a persuasive orator, stirred the farmers into activity and very soon a large number of farmers' elevators were organized.

Similar tactics were used by the "regular" associations of Iowa and Illinois to compel the young grain firm of Lowell Hoit, Chicago, to refrain from doing business with farmers' elevators, and this firm also carried the battle back to the country and organized more farmers' elevators.

The following are samples of two letters, quoted from the testimony above mentioned, showing how pressure was applied to the Chicago firms:

(Copy)

ILLINOIS GRAIN DEALERS' ASSOCIATION
Secretary's Office, Forsyth, Ill.

October 7, 1902.

Lowell Hoit & Company,
Gentlemen:—

I am told that you are bidding on irregular firm at Howard, Illinois. I presume you supposed them to be regular.

I am

Very truly yours,
(Signed) H. C. Mowry, Sec'y.

Des Moines, Iowa, September 22, 1903.

Lowell Hoit & Company,
Chicago, Ill.
Gentlemen:—

I wish to advise you that F. M. Terry, of River Sioux, has no facilities for handling grain and is not recognized as a dealer by this association.

Will you please advise me what your disposition is in regard to doing business with shippers who have no facilities? Not hearing from you I shall conclude that you are disposed to take business from scoop shovel shippers and will be compelled to advise our members of the facts.

Yours truly,
(Signed) Geo. A. Wells, Secretary.

(Copy)

Des Moines, Iowa, Aug. 31, 1904.

Confidential
To Members:—

Will you please correspond with Lowell Hoit & Company, Chicago, Illinois, with a view to giving them some shipments. They are taking business from farmers' elevator companies not recognized by this association, and I find that they are not getting any business from regular dealers.

My purpose is thus to place them under sufficient obligation to the members of this association, so that they will consider it for their best interest to confine their dealings in the future to the firms that are recognized.

Do not raise the question about the farmers' elevator companies in your first letter, but take that up with them later, after having given them some business. Please keep this matter confidential and advise of your actions and results.

Please answer questions in blank form given below, detach, and return same to me at once.

Yours truly,
(Signed) Geo. A. Wells, Secretary.

Blank Form—in part as follows:

Have you done any business with firms named below during the past year, to wit:

Hateley Brothers,	Chicago, Ill.	Ans.———
Eschenburg & Dalton,	Chicago, Ill.	Ans.———
Lowell Hoit & Co.,	Chicago, Ill.	Ans.———

These quotations are given at length—they form but a small fraction of the published testimony—because they illustrate the sometimes neglected point that the central, organized market has given the farmer substantial protec-

tion in time of dire need. At the present time 56 per cent of the grain arriving at Chicago comes from farmers' elevators; only 5 1/2 per cent comes from line elevators. The balance comes from independent elevators and interior cities.

(4) **To Arrive Grain.**—The practice of buying grain "to arrive" is older than the Exchange itself. It is one method of making "forward-contracts" which seems to have been in use, to a limited extent, in our eastern markets from the time of the Revolutionary War on. As soon as Chicago became a grain market this method of dealing came into vogue. Thus the local papers of September 2, 1848, quote corn at 37 to 38 cents, "at which price contracts have been made to deliver within a short time."

The Chicago Daily Journal of April 21, 1848, quotes a sale of corn to arrive. Several to arrive sales are reported for May. Most of the corn arriving at Chicago during September, 1848, was on to arrive contracts.

On August 25, 1849, the Chicago market report told of poor crops, rust damage to wheat, etc., and quoted choice samples of winter wheat selling at 95 cents to arrive. Owners with grain in store along the Illinois river or the Canal made a common practice of selling this grain to arrive in Chicago. When storage facilities increased in Chicago, and particularly when the great Terminal Elevator Companies came into power, the reasons for buying to arrive increased. This ultimately led to a long controversy on the Board and in the courts, over the "Call Rule" question.

The Call Rule.—Manifestly the owner of storage could safely send out large bids to the country for "to arrive" grain, knowing that he could at least have facilities for storing it. Whereas, a dealer in cash grain, depending for an outlet on eastern mills, for instance, must be limited in

his "to arrive" buying to actual orders in hand. It is obvious that such a situation would put into the hands of the small group of Terminal Elevator owners a larger control of the cash grain market than that held by the receivers and shippers who depended in part on receiving consigned grain and in part on receiving buying orders from eastern consumptive buyers. To preserve a competitive market and to preserve the protection to the country shipper furnished by the receivers and shippers (cash grain commission merchants), the so-called "Call Rule" was adopted in the year 1906. Prior to this time some of the large terminal houses were making secret bids by wire to the country, overnight, for grain to arrive. The Call Rule put an end to secret bids. One bid was established by an open, competitive call at the close of each day's trading, and this official bid price held good overnight, or until the opening of the Exchange next morning. Any one was free to bid for any quantity of grain to arrive, at this price. This rule was attacked in the Courts, under the Sherman Anti-Trust Law, as being in restraint of competition. It was defended by the Board as preventing concentration of the grain trade in few hands and in keeping alive competition. The testimony of the country grain trade proved the Board had the facts on its side. The Supreme Court of the United States early in the year 1918 handed down a decision upholding the Call Rule of the Board.

When the Call Rule was under fire by the Courts, the Board adopted a modified rule governing the to arrive business. On October 6, 1913, this new rule went into effect, permitting any house to bid the country overnight any price for to arrive grain, provided only, that a notice of such bid be sent to a "reasonable number" of competing firms (who

may offer the grain themselves at the bid price), and that a notice of the bid and a list of the notified firms be filed in the office of the Secretary of the Board. Each competing firm in turn notifies the Secretary's office of its receipt of the to arrive bid, and in this manner the Secretary is able to check up and determine how faithfully the rule is obeyed. In practice the large Terminal Elevators—the principal buyers—notify from twenty to thirty firms. These firms, then in turn, bid the country overnight on the basis of the "firm bid" which they have received. During trading hours on the floor, any firm may bid the country any price for to arrive grain, all such bids being immediately posted on a large blackboard so that the price is an open, competitive one. The country shipper of course follows his own preference in shipping grain on consignment or on to arrive sales. What he actually does do depends on condition of crops, weather, prices, market tendencies, and the car shortage problem. In some seasons to arrive selling is preferred by country shippers; in others, consignment.

(5) **Future Trading.**—Future trading on the Chicago Board of Trade has had two periods of growth, namely (1) before the Civil War; and (2) after the Civil War. The days before the war were days of a small volume of future trading; the days since the war may be called a time of a large volume of future trading.

Future trading, in its smaller scope, has its definite beginning, in the to arrive grain business. This was clearly foreshadowed in the preceding discussion of to arrive grain. As further illustrating the early method of to arrive trading, leading to ordinary future trading as now known, attention may be called to the situation in Chicago in the spring of 1856—a typical condition. On April 1, 1856, Chicago had

in store 447,600 bushels of grain, while boats with a capacity of 1,500,000 bushels were waiting in the harbor for a cargo. Grain was stored in the country, along the canal and the Illinois river. By the end of February 100,000 bushels of this grain had been sold for spring delivery, May being the favorite month of shipment. To further illustrate the origin and growth of future trading, a few concrete examples may be given from the Board's early history.

The year 1851 was noted as a year showing a marked increase in the quantity of corn sold for future delivery, particularly in March and April for June delivery.

During 1853 corn and oats were sold very commonly for future delivery, mainly to arrive, from Canal and River points.

During 1854 there was an increasing amount of selling for future delivery. The Crimean War introduced a new speculative factor in the market. New Orleans at this time was also making forward contracts, for the local papers of January 13 reported contracts for 150,000 bushels of corn deliverable in March and April. *The Chicago Democratic Press* of January 31 said, "There is a strong disposition to operate for future delivery here and elsewhere on the part of the buyers, but holders in store are extremely sanguine and quiet." The same paper on March 12 reported the arrival of 70,000 bushels of corn in the last three days, adding "by far the greater proportion is for shipment on contracts already made." *The St. Louis Evening News* at this time, as quoted in *The Chicago Journal* of March 29, 1854, said:

> Wheat contracts, flour contracts, and purchases of corn, weeks and months since, during the inflation, are beginning to mature and some to fall through, as they usually do when there is a sudden depression or inflation in prices. . . . We have seen during the past few

weeks heavy arrivals of flour, grain, provisions, etc., which were bought during high prices, received and paid for cheerfully. . . . The truth is, it requires considerable moral honesty and a fair share of mercantile integrity to receive and pay for large purchases of grain which have declined from 25 to 35 cents per bushel, and flour which has slipped down $1.00 to $1.50 per barrel, but nevertheless it is done, we may say daily and hourly in this city.

The Journal of April 21 made note of a future contract for 100,000 bushels of corn at 50 cents, delivery in July on board a vessel; the purchaser had just sold out half his contract to New York parties at a profit of $3000.

There is no evidence that there was a class of dealers giving their whole time to speculation, at this period. However, the evidence does indicate that most of the dealers themselves were also, at times, speculators. Uncertainties as to arrivals, as to weather conditions, as to movement of lake shipping, as to foreign markets and other factors, subjected the market to more severe fluctuations than is the case at present. And wide fluctuations in turn begot speculation.

At this early period there was also future trading in grain in New York, St. Louis, New Orleans, Milwaukee and Buffalo. But it was in Chicago that this form of trading increased and grew to large proportions.

The Chicago Democratic Press of June 4, 1856, reported that the great bulk of the transactions in corn were for future delivery. "Contracts are almost daily maturing," says this journal. This indicates that there were no fixed months for deliveries, as at present.

Short Selling.—Most of the forward contracts for delivery of grain were made by parties owing the grain. However, more and more the practice developed of contracting

to deliver grain which the seller did not, at the time, own—*i. e.*, short selling. Some evidence of these "bear operators" may be interesting.

In 1850 an abundant corn crop depressed the market from 52 cents to 31–35 cents. In the face of this big crop, a "bear," on October 18, sold 30,000 bushels for delivery next June at 28 cents. This bear apparently lost seven cents a bushel, although by November, 1851, the price had fallen to 26 cents.

The Chicago Journal of May 13, 1853, reports: "High price of corn is due to scarcity of boats on the Canal, rendering parties on the Illinois River unable to send forward but little more than sufficient to supply contracts previously made for delivery at this point. In some cases even doubts are entertained of the ability of contracting parties to fill engagements against the time stipulated for, and some speculative feeling has been observable in consequence."

The Chicago Democratic Press in 1856 (June 11) stated, "Thus far sellers have made all the money at the expense of the buyers." That week, wheat had declined 18 to 20 cents a bushel. The buyers were limited to "one or two shorts, who, having sold largely last week at higher prices are now advantageously providing for their contracts."

This same year, 1856, affords a good illustration of a very modern method of settling contracts. "A single lot of 15,000 bushels," says the *Press* of August 1, 1856, "has within two days passed through fourteen hands, and in these transfers settled contracts for some 200,000 bushels."

The second period of future trading, the period of big volume, dates from the Civil War. The cause of the large increase in future trading was due to the practice of the Quartermaster's Department of the United States Army in

buying large orders of oats for future delivery. The Government used the speculative market to avoid speculation—to have a definite supply of a definite grade at a definite price. Without definite grades there could of course be no future trading in grain. And evidently, by the time of the Civil War, the Board of Trade had put inspection and grading on a workable basis.

First Rules on Future Trading.—That future trading was a voluntary and spontaneous growth in the grain market of Chicago is evidenced by the fact that the Board had no rules on the subject until many years after the practice became common, or, to be specific, not till October 13, 1865. A margin rule (requiring ten per cent margin) had been adopted in May, 1865, but no comprehensive rules covering future trading. The rules adopted in October merely faced and squarely met the existing situation. Future trading was now brought under fixed, standard, definite and public rules. These rules covered the rights of parties on time contracts, and the failure to deliver on contracts. Future trading proved to be a two-edged sword cutting both ways. For a time in the earlier years of its growth, the abuse of it threatened to overshadow the use of it. Some highly respected officers and members of the Board were caught in squeezes and market manipulations and threatened with bankruptcy. For some years a commercial "code of honor" prevailed, like the old code duello, to the effect that it was honorable to manipulate the market against your fellow member, but that it was dishonorable in him to refuse to settle at the fictitious price. This code of honor was cloaked behind the ethical claim that a person voluntarily entering upon a contract must live up to it. However, self-interest led the Board to take in hand the whole question of Corners, and to

evolve rules accordingly, as will be seen in the discussion of corners just below. Among other abuses which the "black sheep" of the Board introduced quite early were those technically known as bucketing trades, matching trades, and crossing trades. These mean, respectively (1) for the house to take the other side of its customer's trade, instead of executing it in the open market: (2) for the house to put the trade of one customer against the trade of another customer, instead of executing both trades in the open market: (3) for one house to turn a customer's trade (a buying order, for instance) over to a second house in exchange for a trade made by a customer (a selling order) of the second house, instead of both houses executing these trades in the open market. A Rule was adopted prohibiting all three of these practices. The penalty is expulsion from membership. This extreme penalty has been inflicted at different times, and, in one conspicuous case, upon an ex-president of the Board of Trade.

The Rules governing future trading, after fifty years of growth and amendment have now been stabilized to meet the needs of the various parties immediately concerned in grain marketing, namely, the speculators, the hedgers, the cash grain interests, the warehouse interests and the banks and credit interests.

Credit, Banking, and Future Trading.—It may be that in an ideal condition of society, there will be no credit transactions, everything being on a strictly cash basis; but that question cannot be discussed here. The condition which confronts us in business now is one of a vast and ever growing credit structure. And in the grain trade credit is mobolized and safeguarded to a very high degree of business efficiency.

David R. Forgan, President of the National City Bank of

Chicago, briefly and clearly stated the relation of credit to future trading in these words:*

"Warehouse receipts for grain, or anything else that finally becomes human food are, in my opinion, the best possible collateral for bank loans. I have seen the time more than once when high class stocks and bonds, and even government bonds, could not readily be sold, but I have never seen the time, nor do I even expect to see it, when anything that has to be eaten could not be sold. The warehouse receipts, therefore, above alluded to, constitute a collateral which is always available for the payment of debts. Furthermore, if the grain or provisions represented by the warehouse receipts, are already sold for future delivery, that fact adds a great element of strength to the loan, because there is a third party obligated to take the grain at a certain time for a given price. When I lived in Minneapolis I had the only unpleasant experience I have ever had in connection with the elevator business. A terminal elevator concern filled its elevators with wheat, and thinking that the market was likely to go up they did not hedge it by selling for future delivery. In other words they speculated on their wheat. The market had a large and sudden drop, with the result that the elevator concern failed, and the bank with which I was connected made a loss. The present method, therefore, of carriers of grain or provisions selling them for future delivery is a highly satisfactory one to the banks whose money is loaned to the carriers. The sale for future delivery is the final link in the chain that makes such loans the best in the world."

Influence of Future Price on Cash Price.—Does the future price control the cash price? Some experts on the

* *National Hay and Grain Reporter*, May 20, 1911, p. 29.

grain trade claim that it does. And since the future price is made in the pit, largely under speculative trading,—the conclusion is also reached that the cash price is a mere football of speculation. It has already been stated in Chapter I that cash price reflects supply and demand conditions. It may now be stated at this point, that future price does not determine cash price.

The course of corn prices on the Chicago Board of Trade for 1917–1918 illustrates the fact that futures do not dominate cash prices. The 1916 corn crop was small. In 1917 the crop was large—the largest on record, according to the figures published by the Department of Agriculture. But this corn was wet and very largely unmerchantable. Coupled with this fact came war conditions, government food control, car shortages, coal shortages, and general market demoralization. However, the consumptive buyers of corn (the corn products companies, the mills, the feed manufacturers, livestock interests, etc.) needed the corn and bought freely. In January, 1917, cash corn ranged from \$.93 1/4 to \$1.03, and the May corn at the same time was \$.93 1/2 to \$1.03 1/4, or practically the same as the spot. From this date on the premium on cash corn gradually increased, as both the spot and the future rose in price. In July cash corn had climbed to \$2.32—a figure so high as to alarm government officials. At this period we were shipping every possible ounce of wheat to our allies in the World War, and hence we were consuming all sorts of wheat bread substitutes, one of which was corn. Officials of the federal government gave a warning to the Board of Trade that corn prices were getting too high, and that speculation on corn must be curtailed or stopped altogether. The assumption apparently was that speculation was in part the cause of the rise in price,

—an assumption which later events proved to be contrary to the facts. The Directors accordingly on July 11 fixed a maximum or upset price on corn futures for 1918 of $1.28 and forbade the making of any future contracts for delivery during 1918 in excess of this upset price. And on the next day—July 12—the Directors made the same rule apply to all future corn contracts for December, 1917, delivery. This of course held the future price below $1.28. Now, according to the theory of some thinkers, this regulation would have held the cash price down also. But the contrary thing happened. The trend of cash price was upward, till the new corn crop began to arrive on the market. At no time after July did cash corn fall below $1.60, and most of the time it was above $2.00.*

The natural position of futures, in months under old-crop influences, is of course above cash by the amount of the carrying charge. The "carrying charge" includes the storage charge in the terminal elevator (fixed by the Rules of the Board of Trade), the insurance on the grain, and the interest on the money invested. But when cash grain is selling under old-crop influences (as wheat in April or corn in July) and the future delivery is under new-crop conditions (wheat for July delivery, corn for December delivery), there is of course no influence of futures over cash or cash over futures.

Oats futures ranged below cash oats during the year 1918, instead of above. Corn futures ranged below cash corn during the same year. The pressure of consumptive demand was strong enough to keep the cash grain at a premium over futures.

The conclusion seems warranted that neither future nor cash price has a dominating influence, permanently, over the

* See Appendix 5 for statistics.

other, but that both are merely effects of supply and demand causes. They are, in short, effects of the same underlying causes.

Delivery Months.—At first future trading was done for delivery in every one of the twelve months of the year. Gradually however, trading concentrated on certain months with reference to the harvest period, the crop moving period, and the opening of Lake Navigation. For wheat, this meant July, September, December and May. Corn usually has one or two more delivery months. It is custom which has fixed the delivery months.

(6) **Corners.**—"Cornering the grain market" is, in the minds of many people, a popular pastime on the Board of Trade. And this belief is founded on facts in connection with the history of the Board, from its earliest days, down to ten or fifteen years ago. What the past history has been and what the present condition is can best be shown by a simple narration of the facts.

It was the Civil War, as stated before, that gave a great impetus to future trading, but it was the period immediately following the war that saw a great spurt in the business of cornering the market. Chicago's historian Andreas speaks of the year 1868 in these terms:

"The year of corners. There was a corner a month, three on wheat, two on corn, one on oats, one attempted on rye, and the year threatened to go out with a tremendous one on pork products. The corner on Number 2 spring wheat which succeeded in June, started at $1.77 and culminated June 30, at $2.20. The price in New York at the time was $2.02, and the day after the corner the Chicago price fell to $1.80, and the second of July to $1.75. This corner created much discussion as to restrictive rules, and the

agitation was brought to a head by a corner on September corn."

This September corn corner squeezed many prominent members of the Board, including the President. The Board passed the following Resolution against corners October 13, 1868:

Resolved, That the practice of "corners" of making contracts for the purchase of a commodity, and then taking measures to render it impossible for the seller to fill his contract, for the purpose of extorting money from him, has been too long tolerated by this and other commercial bodies in the country to the injury and discredit of legitimate commerce; that these transactions are essentially improper and fraudulent, and should any member of this Board hereafter engage in any such transactions, the Directors should take measures for his expulsion, under the provisions of Rule V for the prevention of improper and fraudulent practices.

But alas for this good resolution! It went the way of many other good intentions. That was the era of the settlement of the public lands, with their concomitant land frauds and land speculations, of unabashed railway rebating, and of general laxity in business morals not tolerated to-day. And so the Board of Trade was at this time far from being able or willing to deal firmly with the evil of corners.

For instance, in 1871 (July) there were corners in wheat and oats. In August there was a squeeze in wheat, but wheat was rushed in by boat, and the market broke 20 cents a bushel, ending the squeeze. The year 1872 was a year of manipulations and attempted corners. One firm attempted to corner oats in June, but were themselves bankrupted and suspended. In August a wheat corner was promoted by two Toronto and two local traders; wheat was shipped in, break-

ing the price 47 cents in a little more than twenty-four hours. One of the Toronto traders was suspended from the Board.

At this juncture the Board attempts a constructive reform, by adopting an anti-corner rule, permitting the settling of contracts on an "intrinsic value" basis rather than a "fictitious price" basis.

The Chicago fire of 1871 seemed to encourage, rather than discourage speculation in its various forms.

One of the ablest secretaries the Board of Trade has ever known, Mr. Randolph, spoke of the pathological condition of affairs in his Annual Report for 1872, in these words:

"The year has probably, as a whole witnessed more irregularity and excitement in the grain trade than any of its predecessors. The trading (largely on speculation) has been enormous, and the tendency for speculation has indeed been rampant. Various theories are advanced as accounting for this growing mania, the more plausible one, perhaps, being that owing to large losses by our fire and other sweeping misfortunes here and elsewhere, men have been anxious to hazard on operations apparently promising speedy and fortunate results; but this cannot account for all this increase in this class of business. It is well known by those familiar with the business that much the larger portion of it is transacted by order of and on account of parties not residents of this city."

In 1874 two full-fledged corners are reported, despite the good resolutions of the Board. There was an oats corner by G. W. Adams and a corn corner by W. N. Sturges. But in a September corn corner Mr. Sturges himself was caught, and was expelled by the Board for violation of its rules.

In 1878 there was a squeeze in May wheat; a corner in July wheat; and a squeeze in December wheat. The last was

engineered by a Mr. Keene of New York, and was carried over into 1879.

By the year 1881 the men with millions, the "giants," began to operate in the pit. Hence we have a decade famous in Board of Trade annal for the number and size of the attempts to corner the market. In January a big wheat deal was started. In February a big packer began operations in pork. In March there was a flurry in the wheat pit. In April there developed a shortage in rye. In July the biggest dealings thus far in corn, wheat and oats were seen, the month closing with a big oats corner. August saw a wheat corner engineered by Cincinnati parties. In October came a squeeze in corn. The year ended with a corner in barley. The Directors finally took steps to regulate and curb to some extent the evil. They fixed an ~~upset~~ price on corn at 62 cents—much to the disgust of the bulls. The Board also considered the advisability of having authority given them by the membership to declare grain stored in boats and outside warehouses regular for delivery on future contracts, thus making a corner more difficult.

The year 1882 saw four corners and defaulted contracts in wheat in April, June, July and August: also a corn corner in August, a lard corner in September, and a ribs corner in October. A great many lawsuits followed these corners. Sentiment on the moral question involved in corners was not crystallized. Thus, the anti-corner rule of 1871 was resubmitted, and was repealed by a vote of 490 to 410.

During the year 1883 there were few corners, and not one of them a success. The corner of the wheat market in 1887 is known as the Harper deal and the Kershaw failure. A squeeze was run in May wheat. But the amount of wheat in store increased rapidly, to meet the squeeze. The Directors

declared additional storage regular, thus adding 300,000 bushels to the storage capacity of the city. The clique running the corner now sold May wheat and bought June and July wheat. The clique became a heavy buyer and prices rose. The high prices attracted wheat to Chicago. The price of June wheat was maintained at 88 cents for several days. The price of some June deliveries rose to 91 1/4 cents. More wheat poured in. The directors made additional buildings regular with a capacity of 1,000,000 bushels. The directors discussed the question of making wheat on track regular. The clique running the corner showed signs of inability to receive and pay for so much wheat. On June 11, July wheat fell from 86 1/8 to 82 1/2 cents. Cash wheat was now selling at 92 cents, and a new crop in sight of more than average size.

The crisis came on June 14 when wheat dropped nearly 19 cents, following the failure of a Cincinnati bank. The clique made money on their short sales: losses on the long wheat were never paid. The Kershaw house was unable to settle with any of its creditors during the year and so with many other houses. A Cincinnati banker, who was helping finance the corner with money obtained illegally from his bank, wrecked his bank and was given a sentence of ten years in the penitentiary. However, later evidence tends to prove he was merely the scapegoat, not the real criminal.

One outstanding feature of this corner was the fact that one Chicago Elevator Company completed the erection of a 400,000 bushel elevator in 14 days, and another grain dealer built and equipped an elevator in 30 days.

This Kershaw corner of 1887 was the most disgraceful deal in connection with the whole distory of the Board of Trade. It was frankly a premeditated raid by a few outsiders, aided

and abetted by a traitor to his associates of the Board of Trade. It should have been treated by the Board for what it really was—an act of piracy.

The year of 1902 is known as "Oats corner" year on the Board of Trade. This frank and deliberate cornering of the market brought much financial disaster and led to forty-one lawsuits. The court held that contracts, in case of a corner, must be settled at a price representing the actual value of the commodity, and not the fictitious "corner" value.

The John W. Gates corner of 1905 may be mentioned, since it is typical of the cornering operations of the period. In February, 1905, May wheat began to show signs of a corner, the understanding of the Board of Trade being that certain Wall Street interests headed by Mr. John W. Gates were long. At the close of March May wheat stood at 25 cents over July. There was talk of litigation, should a corner develop and force artificial price levels. On April 22 the Gates interests began to unload their wheat, in order to realize their paper profits, selling 10,000,000 bushels. This broke the price to $1.05, whereas the wheat had cost $1.15. Later the rest of the line was sold, 8,000,000 bushels in all, adding another $800,000 to the losses of the Wall Street interests. The price declined to 86 3/4 cents on April 27. The corner, like most corners, had failed, and its promoters had lost money.

The "Three Big Corners."—In the minds of the public there stand out sharp and distinct three so-called corners on the Board of Trade, namely, the Hutchinson corner, the Leiter corner, and the Patten corner. One of these was not a corner; one was a failure and wrecked the man who ran it; one may be properly called a temporarily successful corner. The importance of these three "corners" warrants their dis-

cussion in detail. These corners mark approximately twenty years of Board of Trade history, and are associated with the three dates, 1888, 1898 and 1908.

The Hutchinson Corner: 1888.—Mr. B. P. Hutchinson was a factor in the market during the entire year of 1888. In the second week of May the Government Crop Report appeared, forecasting an immense shortage in the wheat crop. Wheat advanced 4 cents, and Hutchinson was supposed to be on the losing side (short side) of the market. The general course of the market, however, was downward until July, and by July 8, Hutchinson was said to be a heavy winner. During August he took the bull side of the market, buying September wheat, and becoming long, it was estimated, 5,000,000 bushels of wheat. Then came serious frost damage; and a sharp advance in wheat. By August 25 European markets were higher on account of European crop shortages. When September delivery arrived, Hutchinson received and paid for large quantities of wheat. He then began to buy December wheat. By September 22 wheat for September delivery reached $1.00 for the first time in five years. Hutchinson sold 1,000,000 bushels at a profit, without checking the price advance. The Northwest had suffered a crop disaster of the first magnitude. The September shorts found wheat at $1.28 on September 27; at $1.50 on September 28; at $2.00 on September 29.

Wheat for December delivery opened at 104 1/4 on October 1. Hutchinson bought December wheat, bidding the price up to $1.08.

In October a correction in the Government Crop Estimate reduced the figures on the wheat crop by 100,000,000 bushels, and this helped the bull movement.

The market showed some reaction about this time, falling

ten cents. It is now supposed that Hutchinson took first one side and now the other of the market.

Unquestionably Hutchinson had supply and demand factors with him during most of the year, and realized great profits.

During the year 1890 Hutchinson was very active, but was unable again to dominate the market. He took the bull side, but supply and demand factors were against him. After this date he ceased to be an important market factor. His successful corner was a combination of bold and daring use of millions of dollars, on the side of the market which had the fundamental factors of supply and demand with it and not against it.

The Leiter Corner: 1898.—Mr. Joseph Leiter entered the market in 1897 on the bull side, believing conditions justified higher prices. January 1, wheat opened at 81 cents, and stood at 74 cents at the close of the month. Cash wheat worked down to 70 cents and under, in June. There was then a rumor of a corner in July wheat. Towards the close of June wheat advanced to 73 1/2 cents. The first week in July came hot winds in Kansas, affecting corn but not wheat. On July 10 wheat stood at 69; on July 26, at 79. July deliveries amounted to 1,000,000 bushels, and with a profit to the buyer. The August wheat market opened at 76 cents, and by August 11 it stood at 83 cents. The next day September wheat advanced 3 cents. Cash wheat reached $1.00 during this bull campaign. High prices attracted large receipts, the western roads bringing in over 5,000 cars of grain on the thirtieth and thirty-first of August.

Cash wheat failed to hold at these high prices during September. William Jennings Bryan issued a statement that the higher prices for wheat were due entirely to crop

shortages in India and Europe, and had nothing to do with political events or free silver.

Speculation was shifted to December wheat.

Just prior to the first of December came the great export movement of wheat, a part of the Leiter plan to keep up prices on December wheat of which he was the owner.

By December 9 a scarcity of cash wheat put the price up to $1.09. This high price attracted an avalanche of wheat to Chicago. Big receipts forced the market down to 97 1/2. Supplies from Minneapolis and Duluth, and from Ohio, Indiana and Michigan made it easy for the shorts to deliver. It is said that Armour alone chartered a score of large lake vessels, hired icebreakers and tugs, and got safely out of the Duluth harbor and through the Soo canals, bringing down 2,000,000 bushels of wheat in time for December delivery. At any rate, contract grade of wheat in store in Chicago increased from 5,180,000 bushels, December 18, to 9,026,000 bushels December 31. Nearly all of this was delivered to Leiter. In an interview at this time, Mr. Leiter is quoted as saying:

> I am confident that the price of wheat will go up, and that we will sell our wheat at much higher prices than now quoted for cash wheat. There is no special reason why we should feel despondent when we know that our wheat is of exceptionally high grade. It has been bought cheap, and the general conditions of supply and demand are in our favor.

The wheat probably cost him from 80 to 85 cents a bushel. The cost of carrying this wheat for insurance and storage was $4,450 per day, and with the new year 1898 came the problem of selling this wheat. But 1898 brought a declining market.

Early in the year we were plunged into war.

Wheat kept arriving in Chicago in large quantities—10,000,000 bushels from February 1 to June! Prices held up fairly well for a few months. The Government Crop Report on June 10, however, forecast a record crop. At this date the price was $1.00 to $1.03. Next day the price was 89. On Monday June 13 the price was 85. The occurred the collapse of the Leiter deal. Leiter's loss has been estimated at between two and three million dollars. At any rate he failed to settle in full and was indefinitely suspended from the Board.

The Patten Corner: 1909.—The Patten corner in May wheat, socalled, began in a preliminary way in the spring of 1907. The year began with good crop prospects. Crop damage reports, however, soon began to affect the May wheat market. The green bug was destroying a large portion of the wheat in Oklahoma, Kansas, and southern Missouri, Illinois and Indiana. The estimated damage was given as 106,000,000 bushels.

On May 10 came the Government Crop report, showing a large abandoned acreage of wheat. May wheat now reached 86 3/8 cents, although it had been as low as 75 1/4 cents in January.

It was during May that Mr. Patten was commonly mentioned as being a bull in wheat.

September wheat and then July wheat went above the dollar mark. December wheat soon rose to $1.05.

During the last half of May the market fluctuated up and down with a few sharp backsets. There was an upturn at the end of the month.

Trading during June was active, but not of so much volume as May had been. The green bug damage continued:

hot winds added to the damage. Mr. Patten, it is supposed, was on the bear side of the market during June, notwithstanding the unfavorable crop outlook. With continued bad crop outlook in July, Mr. Patten again it is said, took the bull side of the market.

During August cash wheat prices advanced due to unseasonably cold weather.

During September the price held firm for some weeks, but the approaching financial panic was already making money increasingly difficult to obtain. September closed with wheat below one dollar.

The heavy buying of Patten upheld the market during October.

During the latter half of October the severe financial panic of 1907 was in full force.

During the year 1908 Mr. Patten laid the foundation for his so-called corner of May, 1909, wheat.

In May, 1908, the wheat market opened with prices rising. General bad crop conditions, Hessian fly, reports that the world's wheat stocks were low, all served to advance prices. The Government crop report for May forecast a crop some 200,000,000 bushels below the average.

During September, 1908, Mr. Patten was credited with being the heaviest buyer of wheat.

This buying also continued during November.

The 1909 market campaign was one of the most remarkable in history, for its size.

Heavy exports in the fall of 1908, several poor crop years, increase in domestic consumption had left the United States short of wheat.

May 13, 1909, cash wheat sold at $1.28.

Mr. Patten was blamed for the rising cost of wheat, of

flour, of bread. But he replied that he had kept wheat in America by buying it and putting it in store, and that the high prices were due to the law of supply and demand. He denied he was working a corner.

The top price for May was $1.35 1/2, the month closing at $1.34.

Cash wheat during May opened at 142 1/2 to 145 3/4, ranging as high as 154 on May 25, and closing at 150 to 152 at the end of May. June 1 cash wheat opened at 150 to 153, and ranged gradually higher to the middle of the month, reaching 155 to 160.

Prices held high till the new crop came in, when prices fell to 123 to 124 cents for cash wheat the middle of July.

Hence according to these market figures the high price of May was not due to a Patten corner, but to supply and demand. For June wheat, without a corner, rose above May wheat.

The conclusion seems warranted, therefore, that so far as these three famous corners are concerned, the Patten corner was not a corner: the Leiter corner was a failure: and the Hutchinson corner was a successful corner.

Shortly after the May, 1909, wheat "corner" the Supreme Court of the United States (in a cotton corner case) handed down a decision making unlawful and criminal the cornering of interstate commodities.

In brief, then, this is the story of corners on the Board of Trade. In the early years, and indeed down to within recent years, the legitimate function of future trading was largely prostituted to the running of corners. Who suffered and who was the beneficiary? Since corners always temporarily raised prices the farmers did not suffer. In a few cases bread prices were temporarily raised so that the consumer

"suffered" (although the average American's consumption of wheat for seed, bread and all purposes is only 4 1/2 bushels per year, which, with wheat at $1.00 per bushel, means 1 1/3 cents per day—hence a consumer would not "suffer" very serious impairment of his pocketbook if wheat were temporarily raised to $2.00 per bushel.) Since most corners failed, the greatest loss fell on the promoters of the corner. In the long run, however, the Board of Trade itself suffered most by permitting this lax and immoral practice to run so long. Since the public knows the Board of Trade only through the press, and since the press conveys to the public, as a rule, only the spectacular events, it follows that the reputation of the Board of Trade is based on the spectacular and the evil, rather than the commonplace and the useful. And again, in a more tangible way, each cornering of the market has resulted in financial loss to many members of the Board, and to financial ruin to a few. Manifestly then, the Board has suffered much more than it has gained from corners.

In short, experience proves that corners do not pay.

It is, therefore, both to the public interest and to the Board's interest to abolish corners on the Exchange entirely. It is within the power of the Board of Directors to do this. The absence of corners in late years is evidence that some progress has been made in this direction. But has the Board gone far enough?

Steps Taken to Prevent Corners.—What action the Board has already taken to prevent corners may be summarized under the following five steps:

a. Shipping Grain Out of Store.—The Board of Directors in May, 1910, adopted a resolution branding as uncommercial and dishonorable conduct the practice of selling out the Chicago grain on other markets, at less than Chicago

prices, to produce a shortage in Chicago in order to help the bulls squeeze the bears. Some big wheat bulls had indulged in this practice.

b. Delivery at a "Fair Price," and not at a "**Fictitious Price.**"—In June, 1910, the Board membership adopted a drastic anti-corner rule by a vote of 348 to 191. It provided that the short, in case of a market squueze, could settle at a fair market price plus liquidated damages of not over 10 per cent. The rule provided that the settling price should be fixed by a committee of three, appointed by the President, which committee should take into consideration the cash price in Chicago on the last of the month, the prices in other markets for cash grain, and also for futures: whereas up to this time the rules had provided that the average price of a future should be the settling price for the day.

c. Grades Deliverable on Contract.—The fewer the grades deliverable on contract, the easier it is to corner the market. In the early days, when corners were very common, only one grade of wheat was deliverable on contract, namely, No. 2 spring. At the present time, however, the following 21 grades of wheat are deliverable:

(1) Deliverable on contract, at contract price:

No. 1 dark hard winter wheat
No. 1 hard winter wheat
No. 1 yellow hard winter wheat
No. 2 dark hard winter wheat
No. 2 yellow hard winter wheat
No. 1 red winter wheat
No. 2 red winter wheat
No. 1 dark northern spring wheat
No. 1 northern spring wheat
No. 2 dark northern spring wheat

No. 2 northern spring wheat
No. 1 red spring wheat
No. 2 red spring wheat

(2) Deliverable on contract at 5 cents a bushel under contract price:

No. 3 dark hard winter wheat
No. 3 hard winter wheat
No. 3 yellow hardwinter wheat
No. 3 red winter wheat
No. 1 hard white wheat
No. 2 hard white wheat

(3) Deliverable on contracts at 8 cents a bushel under contract price:

No. 3 dark northern spring wheat
No. 3 red spring wheat

Formerly one grade of corn was deliverable on contracts—and corners were easy and frequent. Now the lowing 12 grades are deliverable:

(1) At 1/2 cent per bushel over contract price:

No. 1 white corn
No. 2 white corn
No. 1 yellow corn
No. 2 yellow corn

(2) At contract price:

No. 1 (mixed) corn
No. 2 (mixed) corn

(3) At 2 cents per bushel under contract price:

No. 3 white corn
No. 3 yellow corn

(4) At 2 1/2 cents per bushel under contract price:

No. 3 (mixed) corn

(5) At 4 1/2 cents per bushel under contract price:

No. 4 white corn
No. 4 yellow corn
(6) At 5 cents per bushel under contract price:
No. 4 (mixed) corn

In the case of oats, three grades are now deliverable—all white oats—No. 2 at contract price; No. 1 at 1/2 cent premium; No. 3 at 1 1/2 cent discount.

d. Delivery on Track.—Normally, deliveries are made only of grain in "regular" public warehouses, the evidence of ownership being the warehouse receipt properly registered and indorsed. In case the operator of a corner owned all the grain in store at the regular terminal warehouses, manifestly the shorts would have to buy of the cornerer at his own price—or default on contracts. To meet this emergency a Rule was adopted providing for delivery of grain: on track within the Chicago switching district during the last three business days of the delivery month. Kansas City has a similar rule for the last six days of the month, and made use of this rule a few years ago to deliver to the manipulator a few hundred cars of grain on track—much to his discomfiture.

e. Declaring Additional Warehouses Regular.—A regular warehouse is one whose receipts are deliverable on future contracts. A Rule has been adopted, giving the Directors authority, in case of emergency, to declare any storehouse in the Chicago switching district with proper trackage facilities, or any vessel in the harbor, to be regular places for the storage of grain deliverable under Board of Trade rules.

These are all very important safeguards and they have apparently worked successfully for several years. In the opinion of the writer, however, the problem of corners is a serious and a fundamental one, and not to be paltered with, or subject to mere good-intentioned regulations. A drastic

remedy is needed. And that remedy, ready to hand and easy to apply, is expulsion from the Board. . Any corner or attempt to corner should meet this treatment. A rule of this kind, once adopted and applied (if need arose) would go far to improve the Board and reassure the public. And, in all human probability, it would definitively end all corners.

(7) Clearing House of the Chicago Board of Trade.—There are two kinds of clearing houses in use in the grain trade, the kind used by the Chicago Board of Trade, and the kind used by all the other Exchanges doing future trading. The functions of a clearing house in the grain trade are somewhat similar to those of bank clearing houses—namely, to economize time and money in settling accounts. The clearing houses of the Minneapolis Chamber of Commerce, the Kansas City Board of Trade and the other secondary future markets are used to keep all open trades margined to the market daily. In these cases the clearing house actually assumes the position of buyer to the seller, and of seller to the buyer. The member filing his daily clearing sheet files with it a check to make good his margins, if the market has gone against him, or, in the event the market has moved in his favor, he receives a check from the clearing house. A certain degree of joint protection is thus afforded all traders which is absent in the Chicago system, as will be explained. The Minneapolis clearing system (as we may call it for short) is based on a clearing house which is a separate corporation from the Exchange, and is a financial institution with adequate funds to protect traders. The Chicago clearing house is entirely different, being sometimes referred to as a mere "post-office" of the Board of Trade for the exchanging of checks and the handling of margin certificates. The Chicago system has been in force 36 years, and many un-

successful attempts have been made to change over to the Minneapolis system. Thus far the majority of members apparently favor the old plan.

Organization.—The Clearing House of the Chicago Board of Trade is in charge of the Clearing House Committee, which consists of three persons chosen by and from the Board of Directors. The Clearing House, as such, has no capital stock or assets of any kind, but is a mere department of the Board of Trade. There are at present (1919) 160 members of the Clearing House, representing the following activities: cash grain; pit scalpers; brokers; terminal elevators; private wire houses; cold storage; meat packing. Firms not holding memberships in the Clearing House clear their trades through members. The income of the Clearing House is derived from two sources—fees for clearing and fines. The clearing fee is 1 1/2 cents for each item on the daily clearing sheet. Fines are as follows: $5.00 if late to the clearing house; $1.00 for each error on the clearing sheet.

Operation.—The Clearing House of the Chicago Board of Trade is used for settling closed trades only. In other words, the party doing the clearing must first have bought and sold an equal amount, and of course for the same delivery month. A man who has bought 100 May corn and sold 50 May corn, is obviously "even" on 50 corn, and is still "long" 50 May corn. The closed trade on 50 corn he will settle through the Clearing House.

Trades are closed in three ways, taking the buyer, for an example: (1) by taking delivery of the grain itself; this is done by feeders, shippers and others needing grain: (2) by receiving a delivery notice that the grain is in store, ready for delivery, which delivery notice is passed on from hand to hand, till it reaches the feeder, shipper, etc., who wants the

grain: (3) by selling in the pit to "even" or "close" the trade. Most future trades are closed this way. An open trade cannot be settled through the clearing house. Closed trades (*i. e.*, bought and sold amounts equal) are settled in two ways, (a) by direct settlement, and (b) by ringing out.

A direct settlement occurs when only two parties are concerned in the trade, as illustrated by the case below:

Direct Settlement

A buys from B 100 May oats at 81.

B buys of A 100 May oats at 79.

This is reported to the clearing house as a direct settle-ent. A owing the clearing house $2000 and B claiming from the clearing house $2000.

However, most closed trades are settled by ringing out, and it will be necessary to explain what rings are and why and how they are made. A ring consists of a chain of buyers and sellers, each of whom has bought and has sold the same amount. Take the following typical case, for illustration:

Ring Settlement

Adams buys 200 May oats of Bryan at 90. Bryan buys 200 May oats of Call at 89. Call buys 200 May oats of Dole at 85. Dole buys 200 May oats of Ellis at 85. Ellis buys 200 May oats of Franz at 80. Franz buys 200 May oats of Adams at 79.

Here is a six-name ring. Rings are formed by clerks of the various houses, designated Settlement Clerks, who congregate mornings in a noisy group in the lower hall of the Board of Trade building, and there, by dint of much

shouting and running about and inspecting of "long and short" memorandum books of fellow clerks manage to form rings of the trades on their books. The ring is then entered upon the firm's Ring Book. By following out the settlement of this six-name ring, the reader will see that it is the simplest and the cheapest way to make the settlement. Each of the six traders in this ring enters in his Ring Book his own ring only, *i. e.*, to whom sold and price, of whom bought and price. A daily settlement price is posted daily by the Board of Trade is a convenient basis for calculating balances due.

Six Name Ring Becomes Six Rings

Settling Price 85		
Adams' ring	*Owe*	*Collect*
Sold to Franz 200 May oats at 79	$12,000	—
Bought of Bryan 200 May oats at 90	10,000	—
Bryan's ring		
Sold to Adams 200 May oats at 90	—	$10,000
Bought of Call 200 May oats at 89	8,000	—
Call's ring		
Sold to Bryan 200 May oats at 89	—	8,000
Bought of Cole 200 May oats at 85	—	—
Dole's ring		
Sold to Call 200 May oats at 85	—	—
Bought Ellis 200 May oats at 85	—	—
Ellis' ring		
Sold to Dole 200 May oats at 85	—	—
Bought of Franz 200 May oats at 80	—	10,000
Franz's ring		
Sold Ellis 200 May oats at 80	10,000	—
Bought of Adams 200 May oats at 79	—	12,000
	$40,000	$40,000

When the clearing sheets have come in from these six firms and the six rings have been checked, they will be found to balance, and five checks will settle all these trades. In actual practice, a firm will form many rings in one day. These will all be reported on the daily clearing sheet and one check will settle the entire day's balance. Some of these trades have been open many days: some are trades made that day in the pit. Thus we see that in the Clearing House system now in vogue in Chicago, only closed trades are cleared, and only balances due on the day's closed trades are paid through the Clearing House. In other words, the day's clearings give no indication of the actual volume of bushels traded in for the day and has no relation to such volume. Since in practice most future trades are finally settled by offsetting other trades against them (paying the balances due in money), the question of the legality of such forms of trading has often been raised.

Legality of Settling by Offsets.—Sometimes the charge is made that contracts for future delivery which are settled by offsets instead of actual delivery are mere gambling transactions. There are two reasons for saying such dealings are not gambling. The first reason is, any trader can always stand on his contract and call for and receive the grain, for the trade is an unconditioned contract. The second reason is, the courts of the land, including the United States Supreme Court, have upheld as legal this form of trading on the Chicago Board of Trade. In what is known as the Christie Case (Board of Trade *v.* Christie, 198 U. S. 236), decided May 8, 1905, the Supreme Court of the United States used this language:

"When the Chicago Board of Trade was incorporated we cannot doubt that it was expected to afford a market for

future as well as present sales with the necessary incidents of such a market and while the State of Illinois allowed that charter to stand, we cannot believe that the pits, merely as places where future sales are made, are forbidden by the law. But again, contracts made in the pits are contracts between members. We must suppose that from the beginning as now if a member had a contract with another member to buy a certain amount of wheat at a certain time and another to sell the same amount at the same time, it would be deemed unnecessary to exchange warehouse receipts. We must suppose that then as now, a settlement would be made by the payment of differences, after the analogy of a clearing house. This naturally would take place no less that the contracts were made in good faith for actual delivery, since the results of actual delivery would be to leave the parties just where they were before. Set-off has all the effects of delivery. The ring settlement is simply a more complex case of the same kind.

"It seems to us an extraordinary and unlikely proposition that the dealings which give its character to the great market for future sales in this country are to be resisted as mere wagers or as 'pretended' buying or selling, without any intention of receiving and paying for the property bought, or of delivering the property sold, within the meaning of the Illinois act. Such a view seems to us hardly consistent with the admitted fact that the quotation of prices from the market are of the utmost importance to the business world, and not least to the farmers; so important, indeed, that it is argued here and has been held in Illinois that the quotations are clothed with a public use. It seems to us hardly consistent with the obvious purposes of the Board of Trade's charter, or indeed, with the words of the statute invoked. The

sales in the pit are not pretended, but as we have said, are meant and supposed to be binding. A set-off is in legal effect a delivery. We speak only of contracts made in the pits, because in them the members are principals. The subsidiary rights of their employers where the members buy as brokers, we think it unnecessary to discuss.

"In the view which we take the proportion of the dealings in the pit which are settled in this way throws no light on the question of the proportion of serious dealings for legitimate business purposes to those which fairly can be classed as wagers or pretended contracts. No more does the fact that the contracts thus disposed of call for many times the total receipts of grain at Chicago. The fact that they can be and are set-off sufficiently explains the possibility, which is no more wonderful than the enormous disproportion between the currency of the country and contracts for the payment of money, many of which in like manner are set off in clearing houses without anyone dreaming that they are not fair, and for the rest of which the same money suffices in succession, the less being needed the more rapid the circulation is."

Supplementing the last point in the above court decision, attention may be called to the ease with which our Government, in the World War, borrowed $25,000,000,000 from the people, promising to repay it in gold, although our total money in the country was only some three billion dollars: and at the same moment, our banks held on deposit, subject to check, payable in cash on demand some $20,000,000,000 more of ' credit money." In a similar manner, the future trade in contracts for grain (promises to pay grain) greatly exceed the amount of real grain, just as our credit currency (promises to pay money) greatly exceeds the amount of real money in the country. Both are cases of mobilizing credit.

And credit is defined as a "promise to pay." And credit is kept good only by meeting the promise—by fulfilling the contract. And modern commerce continues to use more and more credit, instead of less and less credit.

Margins and Margin Certificates.—The rules of the Board of Trade permit members trading with each other, to call, each upon the other, for a margin up to 10 per cent, to protect the trade. Whether this amount of margin or any margin at all is actually called for depends largely on the size of the trade and the standing of the member. The intimate daily business contact of members with one another enables them to make their practice in this matter conform to sound business principles. In dealing with the country customers (who are not members) no rule of the Board applies. Margins are doubtless called from these customers in most cases. It is true, however, that credit is rather freely extended to the country in these matters, the member of the Board thus assuming the risks.

Doubtless no rule of the Board could or should determine how much credit for margining trades any house should extend to its friends. But it would seem to be a matter of public policy to throw more safeguards around the amateur speculator who for the first time is opening a speculative account. There should certainly be a strict enforcement of some margin rule. A decent respect to that growing force known as public opinion warrants an increase in the size of the usual margin up to 20 per cent for non-members, in order to discourage speculation by those who are financially unfit.

As the market moves up or down, as the case may be, the house usually calls on its short or its long customers for additional margins to protect their trades. When "called" for a margin, the member of the clearing house must promptly

deposit the margin in a bank which is on the list of banks authorized by the clearing house to handle margin deposits. This Clearing House Bank then issues a memorandum or notice to the clearing house of such a deposit. This bank also makes out a "margin certificate" in duplicate, one copy of which is kept by the depositor and the other copy is filed with the clearing house. The bank deposit is the security which protects the trade. Upon the settlement of the future contract, the margin is released to the depositor. The payment to the depositor—or to the house calling the margin, in case the change in the market wipes out the margin—is effected by the joint indorsement of the margin certificate by the parties to the trade. If there is a failure to adjust and settle the respective claims of the parties upon the deposit, within three days after the maturity of the contract then either party may, upon application, have a committee of three disinterested members decide the case. When so decided, the president of the Board indorses either the original or the duplicate margin certificate, directing the payment of the deposit in accordance with the decision of the committee.

Arguments for and against the Chicago Clearing House System.—For many years past there has been much discussion among the directors of the Board of Trade concerning a change in the clearing house system. In 1917 a special clearing house committee reported to the Board of Directors that "it is of the unanimous opinion that the present method of clearing trades should be changed, and further recommends the adoption of the so-called Corporation System." No action was taken, however.

During the five-year period, 1913–1917, no subject received more attention from the directors, with the possible exception of bucket shops and private wire houses.

Friends of the present system defend it on various grounds. They say it affords necessary privacy to the houses's confidential business affairs, such as the volume of open trades, to what extent the house is long or is short, etc. And under the other system, it is contended, it would be impossible to keep secret this valuable information, being handled, as it would be, by a large body of clerks. However, it may be rejoined, that the present method of having a small army of settlement clerks comparing long and short accounts and forming rings is far from affording secrecy to the condition of a house's books. Again it is argued that the new plan would be more expensive and would tie up more money in margins.

Again, it is argued that the courts have passed on this system and held it to be legal, therefore it is safest not to depart from it.

The business is too big to handle that way, argue some. But from the standpoint of clerks involved and physical equipment needed, it is likely that the new system would prove workable with fewer clerks and less equipment than the present system.

Under the new system the losses from defaults, etc., falling upon individual members would fall on the Clearing House Association itself, which would accumulate a fund for the purpose of meeting such losses. And when trades are margined to the market every day, losses are thereby greatly reduced both in number and size. Without making burdensome charges, the Clearing House Association would accumulate a surplus to meet losses.

It is argued by a few that the new system would disclose the volume of future trading, and show it to be out of proportion to the cash grain handled by members of the Board. But the United States Supreme Court has upheld the legal-

ity of this future trading regardless of the volume of it, and has decided that the small volume of deliveries on future contracts does not, in view of the large and unascertainable volume of hedging trades, prove such future trading to be gambling. The large volume of future trading—trading in contracts—may be looked on as similar to the large volume of credit transactions compared with the volume of money in the country.

(8) **Option Trading.**—Future trading is sometimes wrongly called option trading. A future trade is an unconditioned contract, and hence it cannot rightly be called an option. The regular hours for future trading on the Exchange are from 9:30 in the morning to 1:15. There has grown up a custom among certain members—very largely speculators—to gather in the pits from 1:30 to 2:30 for a form of trading technically known as bids and offers, or indemnities. It is also sometimes termed puts and calls. This trading is option trading. That is, the buyer of a put has the right, up to a certain time next day, to deliver a definite amount of grain at a definite price named. He has the "option" to deliver or not to deliver, if he has bought the put. Conversely, if he has bought a call, he has the option of calling for the grain. In practice, in this so-called indemnity trading grain is not handled, but merely the balances are paid to effect the settlement. It is looked on as buying insurance. The system is defended by certain cash grain interests, particularly the large exporters and large shippers to eastern markets, on the grounds that it protects them in making overnight offers. It is their custom, they say, to submit large offers to these eastern and foreign buyers, having first insured themselves by their trade in "indemnities." There is no doubt that the system is used to a certain

small extent for such insurance. It is not clear to the writer, however, why this insurance cannot be equally well secured by hedging in the pit, since the put or call is usually several cents from the market price. At any rate the trade in "bids and offers," calling for smaller cash margins (five dollars on 5000 bushels), should be resolutely and rigidly governed by the Board, lest it be used as a bait to lure in the small amateur speculator. For the spirit of the times demands that speculation be not made easier but harder for the beginner.

(9) **The Bucket Shop Fight—The Quotations.**—There is no more dramatic story in all economic history than that of the rise and fall of the bucket shops. The fight of the Chicago Board of Trade against bucket shops had its beginnings as early as the year 1883. As an epitome of this struggle we may quote the letter of the attorney of the Board filed with the Directors in 1916—thirty-three years after the battle first began.

(Copy)

Chicago, April 14, 1916.

Mr. J. C. F. Merrill,
Secretary, Board of Trade.
Dear Sir:—

I am glad to be able to inform you that a letter received from Pittsburg today tells me that in a quo warranto proceedings instituted at Harrisburg by the Attorney General against the Consolidated Stock and Produce Exchange at Pittsburg a judgment of ouster, with forfeiture of charter, has been entered and this troublesome fake exchange is at the end of its career.

This is the culmination of the plan that I suggested to the Attorney General, and he is entitled to great credit for having so efficiently

and expeditiously pushed the matter to a favorable outcome. The plan also included criminal prosecution against the Pennsylvania members of this exchange. These have resulted, as you know, in most of the defendants pleading guilty and taking suspended jail sentences. I have been in conference and correspondence with the Department of Justice at Washington, which I am hoping will result in drastic action against the bucket shop men outside Pennsylvania who have been concealing themselves behind this fake exchange. At no time before, since the bucket shop evil started, has the country, east and west, been so free from bucket shops.

(Signed) H. S. Robbins, Attorney.

A bucket shop may be defined as a fake exchange. Its existence depends on receiving continuous market quotations from a real exchange. Since the Chicago Board of Trade is the world's largest future grain market, the Chicago quotations were used by the bucket shops. A bucket shop equipment, therefore, consisted of a telegraph or telephone wire connection with the source of the quotations: of a blackboard for posting these quotations (ostensibly as fast as they arrived and at the same prices). The so-called trades received by the bucket-shop were not executed on any exchange, and hence did not become contracts for buying or selling grain. The trades were "bucketed," that is, the other side of the customer's trade was taken by the bucket shop. Trading was on very small margin, so that the clerk, the day laborer, the barber, the newsboy and the bootblack could "get in." For instance, it is said many bucket shops would accept a margin of five dollars or even less. Now, a very little examination of bucket shop methods shows why the customer must in most cases lose in this sort of a gambling game. This is true because the margin is so small that it is wiped out and the "trade" closed out before the customer is

ready to cash in on his winnings. The customer, like all speculators, has a nervous confidence that luck is sure to favor him. He either buys or sells, knowing the market can only move in two directions—up or down. Suppose he buys, at $1.00, expecting the market to rise. The market fluctuates. His margin, $5.00 on 1000 bushels, covers a fluctuation of 1/2 cent a bushel. The market may rise to 100 1/2 to 101: but he delays cashing in, buoyed by hope (and certainty) that it is going higher. It falls to 99 1/2. His margin is "wiped out." His trade is closed. He has lost $5.00. A similar situation exists when he sells short, except that he wants the market to drop. Now, it is obvious that by delaying quotations, or by posting bogus quotations, the bucket shop can so juggle the quotations as to reduce still more the customer's small chance of winning. And since most amateurs take the bull side of the market, the bucket shop's problem is simplified.

Bucket shops bore many superficial resemblances to the branch offices of exchange houses. And they had the effect therefore of bringing into general disrepute the legitimate exchanges. It was evidently a matter of self-preservation for the legitimate exchanges, therefore, to combat to the death these bogus institutions. Otherwise an exasperated public would rise in its wrath and wipe them all out of existence together.

The Board of Trade of Chicago frankly admits it was acting on the principle of enlightened self-interest when it waged against these bucket shops the war lasting so many years and costing the Board hundreds of thousands of dollars, and the expulsion of nine of its own members. For it is almost incredible the uncanny strength and vitality possessed by these bastard institutions. Only a brief ac-

count of this interesting and dramatic bit of Board of Trade history can be given here.

The bucket-shop fight was foreshadowed in a clash with the Western Union Telegraph Company in 1868.

The following resolution was adopted by the Directors, March 26, 1868: "Whereas, This Board has from time to time been deprived of its regular market reports from New York, through the neglect, designed or otherwise, of the officials of the Western Union Telegraph Company, while this same company have never failed to supply a private telegram of which they are the proprietors, to the detriment of public business and in violation of their own rules, in giving preference to their own dispatches; therefore,

"Resolved, That this Board will hail with gratitude any relief from the present mismanagement and monopoly of the Western Union Telegraph Company and to this end would extend a hearty welcome and support to the Pacific and Atlantic Telegraph Company, which we understand is about to extend its line from Cincinnati."

The problem of owning and controlling the market quotations was the fundamental issue at stake here—and a problem destined to cause much trouble later on.

In 1876 the first bucket shop opened in Chicago, under the name of Rumble & Company. Two years later there was another—the "Free Board of Trade." In the year 1882 the Board began to consider seriously the curbing of the bucket-shop evil, and the idea was advanced of cutting off their quotations. At the Grand Jury hearings in January of this year, eight bucket shops were reported on. In February the Board asked the Western Union Telegraph Company to consider the propriety of ceasing to furnish quotations to bucket shops. The Board later made a formal request of the

Telegraph Company to cease furnishing to the bucket shops market quotations collected on the floor of the Exchange. The Telegraph Company was realizing too much revenue from this business, however, to lend a friendly ear to any such proposal or request.

A large share of the discussion in the Directors' meetings during the years 1883, 1884, 1885, 1886 and 1887 was devoted to the bucket-shop evil. The bucket shops, once flourishing in all cities and in many small towns, seemed on the decline. By the year 1888 the report was made that the bucket shops of the country were nearly all closed. The courts had begun to recognize their illegitimate nature. However, in 1889 came a court decision that threw the whole matter back into chaos. It was a pro-bucket shop decision, holding that quotations were public property and could not legally be withheld from bucket shops. This opened up again not only the old bucket shops, but encouraged new ones to start. This decision of the courts had one good effect, at any rate. It clarified the issue and brought matters to a focus. The quotation problem must be solved.

In 1890 the Board of Trade decided to stop all quotations. This meant more or less injury to the Board members themselves, but nevertheless the embargo on the continuous distribution of quotations was put into effect. But in ways that were devious, and ingenious to say the least, the bucket-shop experts were able to steal the quotations. In some cases a confederate on the floor of the Exchange signalled the quotations to an office window across the street. In some cases telephone wires were tapped. In some manner the quotations got into the hands of the persistent bucket shops. President William T. Baker was reëlected president in 1891 on the issue of embargoing the continuous quo-

tations. He looked upon the Western Union Telegraph Company as a "secret enemy" of the Board of Trade. Since the embargo failed to accomplish its purpose it was removed in 1892 and open, continuous quotations were again sent over the telegraph wires. By the close of 1895 there were eighty bucket shops in Chicago alone.

Under the presidency of William S. Warren the bucket-shop fight was kept up, and with a better degree of success. Mr. Warren called a convention of all leading grain exchanges to discuss ways and means of fighting the bucket-shop evil. A national anti-bucket shop law was considered.

It rested in the end, however, with the attorney of the Board to formulate and execute a plan which solved the quotation problem and gave a quietus to the bucket-shop curse. This "finish fight" occurred in the year 1900.

A company was formed by the name of the Cleveland Telegraph Company whose purpose was to wrest the control of quotations from the Western Union Telegraph Company. When all preparations were fully made, notice was served on the Western Union that after June 1 the Board of Trade would collect its own quotations and assume control of the wires and instruments on the floor of the Exchange. The Western Union at this time was deriving considerable revenue from bucket shops. The Cleveland Telegraph Company, under control of the Board of Trade, was given exclusive right to collect quotations on the floor of the Exchange, and to distribute them in Chicago. Quotations were furnished to the Western Union and other companies only on the express agreement not to furnish these quotations to bucket shops.

The Western Union and the Postal Telegraph Companies signed contracts early in 1901, paying the Board of Trade

$30,000 annually for the quotations; agreeing to furnish these to only those applicants approved by the Board of Trade; and to cut off these quotations at any time on demand by the Board of Trade. This put into the hands of the Board the power to "choke off" any bucket shop by shutting off its quotations. The leading grain exchanges subscribed for the new quotation service, and continuous quotation service was resumed April 15, 1901.

It was now a question of preventing the bucket shops from securing the quotations either secretly or fraudulently. The Civic Federation and finally the federal Government joined in the fight. Suits were filed against bucket shops in Ohio, Illinois, Nebraska and Wisconsin. During the single year 1902 there were seventy injunctions obtained against bucket shops.

The final triumph by the Board of Trade was won in 1905, when the United States Supreme Court (in the Christie case) handed down a decision to the effect that the Board of Trade owned and could control its quotations; they were its property. The Board now went about the work systematically of ridding the whole United States of bucket shops, being aided by the legal departments of the various States and by the federal Government. A special detective was put on the road, commissioned to ferret out every fake exchange in the country. He found that these bucket shops when killed off one week would reopen the next week under a new name. As public sentiment gradually became informed, however, the bucket shops more and more disappeared from the map. The Pittsburg one, referred to in the opening paragraph above, was one of the most genteel, the most eminently "respectable" in appearance, the most subtle in its remote ramifications, so that it successfully re-

sisted all assaults for a number of years. The Board detective is still employed and has occasion even yet to take the field to put down some fake "grain exchange."

The Board is entitled to credit for fighting continuously and successfully against a powerful and organized group of gamblers and swindlers masquerading under the respectable name of "grain commission" houses and "grain exchanges."

Market News Service.—To safeguard the dissemination of continuous market quotations, and especially to keep such quotations from bucket shops, a Market Reports Committee has charge of this whole matter. A very strict control and supervision is maintained over private wire houses with their numerous branch offices. This committee employs one expert, a member of the Board of many years' standing, to give his entire time to the enforcement of the numerous rules and regulations which have gradually grown up, covering the general field of market news service. The activities of this expert are diverse. The "crop killer" has been killed. Formerly, it was possible to manipulate the market, temporarily, by issuing a report or rumor of crop damage. Now, all market rumors of all kinds are forbidden. The three private crop reporting agencies of the market (namely Snow, Goodman, Inglis) are licensed by the Board, and submit copies of their reports before making them public. A close scrutiny is kept over all market reporting by the press reporters who have the privilege of the floor, to see that their published statements conform to the facts and do not mislead or misguide the public with rumors, advice, or suggestions. The various firms of the Board who issue daily market letters to their customers file copies with the Board, in order that a watch may be kept on the proper use of

market information. Market letters are not allowed to forecast the market or advise customers to buy or sell. They are limited to statements of market news which they have accepted in good faith as true. Certain market news companies sell a news service which comes out on the news tickers. This matter is also under a close censorship by the expert of the Market Report Committee. Once a rumor is started and gets on the wire, it is the duty of this expert to run it down to its ultimate source and to punish the offender—if he be a member of the Board and hence under its jurisdiction.

(10) **Terminal Elevators.**—The relation of the Board of Trade to the terminal elevators of Chicago forms one of the most important features of the cash and futures grain market of this city, involving as it does the vital questions of storage and of warehouse receipts.

The past history of the grain trade, like the past history of any other institution (not even excepting the Church and the State) contains many dark pages, due to the cupidity or the weakness of some of the men engaged in it. The terminal storage record of this market is perhaps no better or no worse than the record of any other commercial institutions of the same period—including railroads, banks, industrial corporations, and so on. To begin with, the railroads of the early day built their own passenger depots here, their own freight depots, and their own grain elevators. At the present time it is not permitted for a railroad to build and also operate a grain elevator in connection with its business. The second step in terminal storage was the building of private terminal elevators by a few larger firms, and the leasing from the railroads of their warehouses by certain large grain dealers. In some cases the elevators were ostensibly "sold"

to the grain dealers, but on such terms as to be in substance, a gift. The railroads in turning over these houses to grain dealers expected in return a certain amount of business to result; that is, the firm would be expected to receive into the elevator a certain amount of grain, hauled over the road. And as the so-called "granger roads" began to reach out farther and farther into the grain belt, it was a matter of competition which roads could secure and keep a large amount of this tonnage. This competition took the form of granting to one large Chicago dealer on each important granger road a special rate over that road; in effect, a monopoly in the grain business on that road. This was reflected back in the price paid at the country station and to the farmer himself. In this manner the Rock Island Railroad was alloted to one firm; the Sante Fe to another; the Milwaukee to another; and so on. Competition in country buying was now dead. At the terminal market, namely, on the Chicago Board of Trade, the small dealers were threatened seriously with extinction. In short the grain business was in a fair way to be concentrated into a few powerful hands. Among the different forces fighting this concentration may be named the Interstate Commerce Commission, the State and federal courts, and last and perhaps most important of all, the Chicago Board of Trade. In a brief narrative like this, only a few typical incidents and episodes may be given in the long, bitter, and dramatic contest between the Board of Trade and the Terminal Elevators. The friction and the clashing of interests have continued almost to the present day. It began with a struggle against the famous Elevator Pool and Elevator Monopoly, and continued till satisfactory working arrangements were made in very recent years.

As foreshadowing the clashing of interests between the

Board of Trade and the Terminal Elevators, the following may be cited:

"So many charges were made of laxity in inspection, and of fraud on the part of the elevator proprietors and wheat mixers, that on the 25th of October, 1861, the Board of Trade appointed a committee to investigate the matter and report the facts to the Board, together with their recommendations as to a remedy for such evils as they should find. This committee, of which Mr. Joseph Wright was chairman, made a report to the annual meeting of April 7, 1862, recommending that all grain bagged on the track should be refused admission to the regular warehouses, and that the names of any members guilty of frauds should be posted on the bulletin board together with a statement of the facts of the case. The annual meeting adopted the report; the Board of Directors on the 25th of April passed the necessary resolutions to enforce this action and the warehousemen pledged themselves to observe the new rules."*

The first Illinois law regulating—or attempting to regulate warehouses—was enacted in 1867.

The Board of Trade sent a committee to the state capitol to lobby for this bill. Some of the chief provisions of this act are these:

a. Railroads to deliver grain to any warehouse to which consigned.

b. Two classes of grain warehouses—Public and Private. Private warehouses must keep in special bins the grain of separate owners. Public warehouses may mix grain of like grade.

c. Inspection before going into Public house. Public house may mix, dry, clean or condition grain upon

* Taylor's *History of the Board of Trade*, p. 292.

owner's request, but treated grain not to be mixed with higher grade.

d. Provision made for warehouse receipts for special binned grain.

e. "§ 9. All persons keeping public warehouses in the city of Chicago shall file with the Board of Trade of said city, on Tuesday of each week, a statement showing the amount of each kind of grain in store in such warehouses up to the Saturday night preceding such statements."

The courts soon held that railroads must deliver grain to any designated warehouse on their own line, but were not obliged to enter into any arrangement to deliver over the tracks of another road.

The terminal elevators in 1870 announced a new schedule of storage charges, thus opening up anew a matter the Board had thought settled. The rates applied to grain in good condition, and to grain out of condition higher rates were applied. Discussions were held on the Board at this time concerning the old evils of forged warehouse receipts, and of the advisability of establishing a central agency for the registration of warehouse receipts. However, the Elevators refused to coöperate with the Board in this reform.

The city papers of Chicago at this time joined in the controversy, the *Times* siding with the Elevators, the *Tribune* with the Board of Trade.

The *Chicago Tribune*, representing the views of the Board of Trade, said, in reply to the *Chicago Times:*

"If it be true, as the *Times* implies, that no regulations can be admitted which will interfere with the right of the elevator proprietors to issue receipts for grain not in their possession, to charge storage on grain which never goes into their bins, to trade ad libitum on the property of other people

which has been confided to them for safe keeping, and for that purpose only, if it be true that they must be permitted to do all this, and without interference or investigation, that the owners of property in that case cannot even have the privilege of knowing whether their property is in store or not; if all this is necessary to save the grain trade of the city from collapse, then we say the sooner a collapse comes the better."

It was at this juncture that the Illinois Constitution of 1870 was being formed. The Constitutional Convention was then in session. A petition was circulated by the Board of Trade asking the Constitutional Convention to take action for the protection of the public against elevator frauds, combinations and over-issue of warehouse receipts.

On May 13, 1870, the new Constitution was adopted by the Convention, and was ready for ratification by the voters. The Board of Trade adopted a resolution urging all members to work and vote for the new Constitution. The Constitution was ratified.

Article XIII of the new Constitution is one of fundamental importance and reads as follows:

"WAREHOUSES

"Section 1. All elevators or storehouses where grain or other property is stored for a compensation, whether the property stored be kept separate or not, are declared to be public warehouses.

"Section 2. The owner, lessee or manager of each and every public warehouse situated in any town or city of not less than 100,000 inhabitants, shall make weekly statements, under oath, before some officer to be designated by

the law, and keep the same posted in some conspicuous place in the office of such warehouse, and shall also file a copy for public examination in such place as shall be designated by law, which statement shall correctly set forth the amount and grade of each and every kind of grain in such warehouse, together with such other propety as may be stored therein, and what warehouse receipts have been issued and are, at the time of making such statement, outstanding therefor, and shall, on the copy posted in the warehouse, note daily such changes as may be made in the quantity and grade of grain in such warehouse; and the different grades of grain shipped in separate lots shall not be mixed with inferior or superior grades, without the consent of the owner or consignee thereof.

"Section 3. The owner of property stored in any warehouse or holder of a receipt for the same shall always be at liberty to examine such property stored and all the books and records of the warehouse in regard to such property.

"Section 4. All railroad companies and other common carriers on railroads shall weigh or measure grain at points where it is shipped, and receipt for the full amount, and shall be responsible for the delivery of such amount to the owner or consignee thereof, at the place of destination.

"Section 5. All railroad companies receiving and transporting grain in bulk or otherwise shall deliver the same to any consignee thereof, or to any elevator or public warehouse to which it may be consigned, provided such consignee or the elevator or public warehouse can be reached by any track owned, leased, or used, or which can be used by such railroad companies; and all railroad companies shall permit connections to be made with their track so that any such

consignee and any public warehouse, coal bank or coal yard may be reached by the cars of said railroad.

"Section 6. It shall be the duty of the General Assembly to pass all necessary laws to prevent the issue of false and fraudulent warehouse receipts, and to give full effect to this Article of the Constitution, which shall be liberally construed so as to protect producers and shippers. And the enumeration of the remedies herein named shall not be construed to deny to the General Assembly the power to prescribe by law such other and further remedies as may be found expedient, or to deprive any person of existing common law remedies.

"Section 7. The General Assembly shall pass laws for the inspection of grain, for the protection of producers, shippers and receivers of grain and produce."

This historic article was effectuated by the Illinois Railroad and Warehouse Commission Act of April 13, 1871, the significant principle of which was to place terminal warehouses under public regulation. This principle was tested out in the courts, the Supreme Court of the United States (in the case of Munn *v.* Illinois) holding the principle to be legal.

Under this act the inspection of grain was taken over by the State. Speaking on this subject, the Board of Railroad and Warehouse Commissioners said in their first annual report:

"The inspection of grain and registration of warehouse receipts having been previously in charge of the Board of Trade of the City of Chicago, and having been carried on under the control of said Board, the Commissioners have, in the main, adopted the rules which experience had taught that Board to be practical and advisable."

This law fixed storage rates for grain in public warehouses.

The manner of issuing, registering and cancelling warehouse receipts was covered in detail, the whole matter being placed under the State Commission.

That the elevators were not in a mood to accept state regulation at that time is seen by the first report of the Board of Railroad and Warehouse Commissioners, wherein this language occurs:

"At an early period official information was received by the Board that none of the warehouses of class 'A' (*i. e.*, public warehouses in cities of over 100,000 population), which are required by the act regulating public warehouses to take out licenses, had complied with the law in that respect. As no possible excuse could exist for such an open violation of a plain law, the Board at once instructed the State's attorney of Cook County, wherein all warehouses of class 'A' are situated, to institute proceedings against said delinquent owner or manager of warehouses."

The railroads coöperated with the warehousemen in obstructing the law, discriminating against elevators not in the pool. It is stated that in 1872 five firms consisting of eight men, owned all the public warehouses in Chicago, and each man owned stock in all the warehouses. A bankruptcy case, at this time (Munn *v.* Scott Elevator Company), brought to the public attention a concrete case of storage tickets outstanding for stored grain, but no grain in store. Writing up this scandal in the grain trade, the *Chicago Tribune* of November 20, 1872, used these headlines: "Ira Y. Munn on Stand Lays Bare Elevator Combination—Profits Divided—Agreement in 1866—Included Northwestern Elevators, West Side Elevators, Galena and Wheeler & Munger—A

General Pool—History of Contracts with Northwestern Railway beginning in 1862 and renewed in 1866."

Public warehousemen, at first custodians only of grain, began the practice of dealing in grain sometime about the year 1885. In other words, they became competitors of those whose grain was stored in their own house. It is readily apparent that such a situation contains potentialities of great evil.

"Regular" elevators were and are those whose warehouse receipts are deliverable on contracts. This necessitates a certain nexus or working arrangement between the regular elevators and the Board of Trade.

In the year 1894 a petition for a Referendum vote of the membership of the Board of Trade secured the passage (698 to 499) of an amendment to the Rules, to the effect that Elevators, to be regular, must agree not to engage in the buying, selling, receiving, shipping, cleaning or mixing of grain. The Elevators resisted the rule and threatened to quit the Board of Trade. They forced a compromise, largely in their own interests. Even this compromise was resisted by a few representatives of the Elevators, who were in turn suspended by the Board of Trade.

President Baker of the Board of Trade, a strong advocate of reform, upon assuming office for his third term in 1895, paid much attention to the elevator question in his inaugural address. He said, in part:

"The alliance between the elevators and the railroads has resulted in reaching out for millions of bushels of grain not naturally tributary to us, and when gathered here preventing it, by such tricks of trade as you are familiar with, from ever getting away again as long as storage can be collected on it. This policy has resulted in such congestion of grain

here as to depress prices to the lowest point in history. . . . A system that permits the proprietors of public elevators, directly or indirectly, to deal in the property of which they are the custodians is essentially immoral. The temptation to reserve for themselves the best of a grade is one to which the law never contemplated that they should be subjected. The elevator is the same blight on legitimate trade that anti-option legislation would have been if enacted. Special rates are made to favored individuals who have the further advantage of elevator control, so that rates charged to the public are rebated to themselves, enabling them to outbid or undersell all competitors. This charge of 3/4 cent for first storage is retained only as a protection to elevator managers against competition of legitimate dealers in grain. It is a charge which you cannot avoid but which is ignored by them in their own transactions, thus forcing everyone to sell to or buy from them."

It is significant to note that President Baker was in 1897 elected to his fifth term as president, on his reform record—a period of service never equalled before or since in the history of the Board of Trade.

A landmark in the long fight with terminal elevators is Judge Tuley's decision in a warehouse case to the effect that a public warehouse owner is a custodian of grain and cannot deal in grain stored in such warehouse.

The findings of Judge Tuley in the case, Central Elevator Company *v.* The People of the State of Illinois are as follows: *

". . . The court finds that defendant . . . is a public warehouseman of Class A in Chicago, and at such times

* Findings upheld by Illinois Supreme Court. 174 *Ill. Reports*, p. 203.

was, and now is engaged . . . in the business of a public warehouseman and in the operation of two public warehouses of Class A, known as Alton Elevator and Alton Elevator B, having a total capacity of 1,850,000. That grain has been heretofore and at and since the commencement of this suit, and now is, bought by said Central Elevator Company, and when so bought has been and is now stored in said warehouses of said Central Elevator Company, and has heretofore been, and now is mixed with grain of others therein stored; that the Railroad and Warehouse Commissioners of Illinois many years ago established the different grades of the different kinds of grain; . . . the said grades are still in force in Chicago, and the grades so established for the different qualities of grain are not such that, under such inspection and grading thereof, all the grain of each grade is of exactly the same quality, nor is it practicable to establish grades of grain which will comprise only grades of grain of exactly the same quality, but it always has resulted and must always result that in the inspection of grain coming to the Chicago market carloads of grain of different qualities have been and must of necessity continue to be graded into the same grade, the difference in the market price at the same time of different qualities of the same grade of grain varying from 2 cents per bushel in the upper grades to 15 cents per bushel in the lower grades; that the great bulk of the grain brought to Chicago is brought by rail, and in carloads, and is inspected by the state inspectors while on the track and before being transferred into the public warehouses of said defendant; that there did not exist in or prior to 1871, in Chicago or in Illinois, any well-known, general, or uniform custom or usage among grain warehousemen to deal in or buy or sell grain, or to store grain owned by

them in their own warehouses, or to mix grain bought by them with that of their customers, and the proprietors of public warehouses of Class A in Chicago did not, to any general extent, begin to buy and sell grain and store or mix their said grain in these said warehouses with the grain of their customers there stored until about the year 1885; that since that year the practice has continued to grow, until for the last two or three years the defendant Central Elevator Company and the proprietors of Class A warehouses in Chicago are the principal buyers and sellers of grain in the Chicago market and on the Chicago Board of Trade, and, by reason of the advantages they possess and certain changes in the grain trade, they have practically driven out of business the class of persons who were before that time engaged in buying and shipping grain in the Chicago market, and said Central Elevator Company and said warehouse proprietors are fast monopolizing the business of dealing in grain in the Chicago market; that upon some of the lines or systems of railroad entering Chicago the proprietors of the public grain warehouses along the lines of said railroad are practically the only buyers of grain received in Chicago over said lines or systems and at the time of the filing of said information said Central Elevator Company and said warehousemen owned at least three-quarters of all the grain stored in the public warehouses in Chicago; that there now are in Chicago twenty-nine warehouses of Class A, with an aggregate capacity of 41,000,000 bushels, and the amount of grain received into them was 73,000,000 bushels in 1895 and 61,000,000 bushels in 1896, and nearly all of said proprietors of said warehouses in Chicago also deal in futures—that is, in the class of contracts for the future delivery of grain which are dealt in on the Chicago Board of Trade; that said defendant

and other proprietors of Chicago warehouses of Class A exact established rates of storage from others, and, while so doing, said Central Elevator Company and the proprietors of the other warehouses of Class A often overbid other buyers of grain in the Chicago market and elsewhere, and are enabled to do this because said defendant and other proprietors of warehouses of Class A in Chicago yield a portion of the established storage rates charged to others upon like grade; that the buying of grain by said Central Elevator Company and said proprietors of Chicago Warehouses of Class A tends to crush competition in the Chicago grain market and to foster in said Central Elevator Company, and in the proprietors of Class A warehouses in Chicago, a monopoly in the grain trade which is and will be hurtful to the people of Illinois, and it is unlawful for a proprietor of a public warehouse of Class A to store his own grain in said warehouse. It is therefore ordered, adjudged, and decreed that from and after five months from the date of the entry of this decree said defendant and his agents, servants, employees, and officers be perpetually enjoined from storing in his public warehouses any grain directly or indirectly owned by or belonging to said Central Elevator Company, or in which said Central Elevator Company may have any interest other than as warehouseman" (dated January 9, 1897).

One militant member of the Board whose active zeal for reform won him the name of "the gadfly of the Board" succeeded in bringing to the attention of the Interstate Commerce Commission (and thus of the world) in hearings held in Chicago in 1906, the relationship of common carriers to country elevators and terminal elevators. The Board is fortunate to have, in crises like this, such true conservators of its permanent welfare and who can see beyond the

moment, even though it entail sacrifices upon themselves.

Following these hearings, and they reveal some unsavory matters, came a year of bitterness and of friction between the elevator interests and the other interests on the Board. Many members quit the Board. The value of a membership sunk to a low level. Terminal elevators had their "line elevators" in the country. They were buying "to arrive" grain. They were in a fair way to crush out the cash grain dealers (commission merchants) and to make this a "rich man's market."

At this juncture a "harmony candidate" was unanimously elected president of the Board of Trade, in order to effect a satisfactory working relationship between the Board and the terminal elevators. The man selected, Mr. Hiram Sager, was head of one of the oldest cash grain houses on the market, and was a man "without fear and without reproach." A written memorandum of understanding was prepared and was signed by the elevator interests, the agreement running from year to year indefinitely unless formally cancelled. Under the terms of this understanding the Board feels secure from year to year in having enough "regular" storage to meet the needs of the dealers in cash grain. The elevators, in turn, know definitely what their working conditions are.

In only one important respect has this agreement been violated in spirit by the elevator interests—although the law of the State forbids the public warehouseman to store his own grain in his own public warehouse and issue warehouse receipts against it; this feature of the law was set at naught by the elevator companies for several years. This they did by a practice which came to be known as "forcing grain into

storage in order to earn the carrying charges." This process was very simple. Cash grain would be bought by the elevator company; it would be sold for cash to brokers to go into store in the company's own public warehouses, at a price 1/8 cent lower than the ruling price for the future; at the same time the elevator company would buy futures from these brokers, at a price 1/8 cent higher than the cash price plus the carrying charges. Thus the letter of the law was obeyed, but the spirit of the law was broken. The courts have enjoined this practice and apparently it has been discontinued.

The "mixing" question was the cause of much litigation, the Board of Trade opposing, and the terminal elevators upholding this practice. The Terminal Elevator may be compared with the milkman delivering milk to the city requiring the milk to grade 3.5 per cent. If his milk is 4 per cent he may safely and profitably dilute it down to the 3.5 limit.* So the elevator called on to deliver on contracts Number 2 wheat would—safely and profitably—"skin the grade" down to the minimum Number 2 limit. In practice a high quality Number 2 wheat could be mixed with a Number 3 and the whole mixture honestly grade Number 2. The outcome of all the litigation was that the elevators could not mix their own grain with the grain of customers; "regular" public elevators cannot be used for this purpose. Under one condition can the owner of a public elevator store his own grain in it, namely, that he special bin it, and then it is not deliverable on contracts in exchange for warehouse receipts. Of course, the terminal elevator, like the farmer or any owner of grain, may mix his own grain in any way he

* For a discussion of mixing water with creamery butter, see Appendix 18.

may see fit: he may clean it, dry it, condition it, and so on. But these operations cannot be carried on in the public warehouses. They must be done—and are done—in private warehouses, and regular warehouse receipts are not issued. The term "hospital elevator" is the term commonly used in Canada for houses conditioning off-grade grain. The farmers grain company (United Grain Growers, of Winnipeg) succesfully operates a hospital elevator and finds it an essential part of the terminal market equipment, particularly when rain, frost, or snow puts much grain out of condition. The term "hospital elevator" is also used in Duluth and Minneapolis, but is not in use in Chicago. Dealers in Chicago who specialize in out-of-condition grain, such as wet corn, heated wheat, etc., are said to operate "salvage houses." Hospital elevators, whatever they may be called, make a market for considerable low-grade grain which were otherwise unfit for human consumption, and the price they pay is reflected back to the farmer. So the mixing evil, so far as it was an evil, consisted in taking advantage of a customer's good quality of grain without letting him share that advantage. Under the present system the customer gets the benefits of any superiority of quality his grain may possess.

The railroad-terminal-elevator monopoly was the biggest monopoly the Board of Trade had to face. At the thick of the fight, it was said that the monopoly was winning, and that one hundred cash grain dealers had already quit the Chicago market. But after the "harmony agreement" was finally reached, ten years ago, the cash grain men felt their existence secure, for the first time. The men who handle cash grain—who receive consigned grain and sell it on commission—are the one protection to the country grain shipper.

Their interests are identical. It is fortunate, therefore, for the country shipper (and the farmer back of him) that in the fifty-year anti-monopoly fight on the Chicago market, the Board of Trade won, and that now, when an issue on this subject arises, and the votes of the membership determine the policy, the numerical voting strength of the elevators is as small as it is. This justifies some confidence in the future continuation of this market as an open competitive market.

(11) Arbitration of Business Disputes.—Disputes arising out of dealings on the Board of Trade may be of two kinds: first, a mere interpretation of the rules; these are settled by the committee on interpretation of rules: second, disputes involving the payment of money. Disputes of this kind go before an arbitration committee for adjustment without employing lawyers or courts, the feeling being that in such highly technical business matters justice is thereby swifter, cheaper, and surer. An appeal lies to the Committee on Appeals, but no higher. Non-members may use the services of the Arbitration Committee and the Committee on Appeals, provided they agree in advance to abide by the decision.

A five-year study of all cases arbitrated (1913–1917) shows that 82 cases were handled, involving a total of $35,561.17. Of these cases, 12 involved non-members. The non-members won in seven out of twelve cases. The bulk of these 82 cases were disputes arising out of future trades, and seem to have arisen out of errors between firms in checking trades.

While the arbitration work of the Board of Trade is not spectacular and hence is not in the limelight of publicity, yet it represents one of the most successful market functions performed by the Board of Trade.

Summary.—We have now seen a picture of the Board of

Trade, and a cross section of one day's trading, together with the historical background of all the more important activities of the Board's membership. Postponing to the next chapter the consideration of the problem of speculation, the conclusions reached thus far in our study may be summarized as follows: The Board of Trade is an efficient piece of market machinery; it is operated at a low margin of cost; it is an open and competitive market; it is operated under democratic rules of self-government controlled by a Board of Directors in the public interest.

V

THE CHICAGO BOARD OF TRADE AND THE PROBLEM OF SPECULATION

The Chicago Board of Trade is best known throughout the United States and the whole world as a great speculative market. The preceding pages have made clear, it is hoped, two facts, namely, (1) that Chicago is the world's greatest cash grain market, and (2) the cash grain business and the speculative trading are closely interwoven, the speculators performing certain important market functions.

In the field of speculation, however, the Chicago market is larger than all the other speculative grain markets of the world combined. While many Minneapolis speculators speculate on the future market of the Minneapolis Chamber of Commerce, most of their speculation is done on the Chicago Board of Trade. The same is true of members of the Board of Trade of Duluth, of the Merchanst' Exchange of St. Louis, of the Board of Trade of Kansas City, and of the Grain Exchange of Winnipeg. So also there are operating on the Chicago Board of Trade speculators in Buenos Aires, in Liverpool, in Vienna, and in other great markets. The eight or ten billion bushels of the world's speculative grain crops (wheat, corn, oats) are all traded in on the Chicago Board of Trade, the total volume of this trading being probably two times the world crop when future trading in wheat is in full operation. The vast volume of future trading on this market, and the great newspaper prominence

given to the more dramatic (but less important) features of it have caused a great many fallacies on this subject to take root and propagate themselves. Many of these fallacies are easily disposed of, and will be so treated in the following discussion. However, at the outset, it is best to pause long enough to agree on what speculation is, and what it is not.

(a) **Definitions.**—One of the most widely accepted definitions of speculation is the following: "Speculation is the forecasting of changes in value, and buying or selling in order to take advantage of them." * It is a stubborn economic fact that values do change from time to time. Anything that affects the consumer's wants, fancies, whims, caprices, taste, prejudice, passions, knowledge or desire may affect his demand. Hence demand fluctuates. The supply—or what is equally as important—the estimated supply present and prospective, changes also from day to day. Hence come changes in supply and demand—changes in value. The definition of speculation assumes that values change, that is, that the economic risk cannot be abolished. This is in accordance with the facts. It also assumes that some persons, believing they can forecast these changes, assume the risks involved in the hope of deriving advantage therefrom. There is also implied in the definition a third consideration, namely, some persons bearing economic risks prefer to shift those risks to others, rather than take the chance of gaining or losing by the approaching change in value. It is a fact of human nature worth noting that some persons have the "conservative temperament" and others have a more adventurous temperament. For example, on the page of a standard financial magazine open before the writer, there

* Report of Governor Hughes' Committee on Speculation in Securities and Commodities. State of New York, June 7, 1909.

are displayed two advertisements of securities, one security yielding 4 per cent and one yielding 8 per cent, or exactly twice as much. Such advertisements are common. They demonstrate the significant fact that many "consumers" prefer a four per cent security to an eight per cent security, because they are conservative, and do not want to assume the additional risk which is associated with the eight per cent security.

The speculator stands midway between the conservative investor and the gambler. The gambler, by betting on a race or game, or by some other form of wager, creates his own risk voluntarily. Then he stands to win all or lose all on the outcome. He is not performing any service, since he is not assuming any economic risk which some one else desires to shift. Gambling has long been outlawed by the State, and has been banned by society, in all but its more refined forms such as card parties and church fairs. Speculation has its legitimate place, and is as common as investment.

We may now consider in turn some of the perennial fallacies on the subject of speculation, such as the following: "Speculation means manipulation of the market;" "Speculation causes corners;" "Speculation lowers prices;" "Speculation raises prices;" "Speculation is caused by future trading," and so on.

(b) Speculation in Cash and Futures.—Speculation is speculation, whether a man buys cash grain and holds it for a rise in price or buys a future contract for grain and holds it for a rise in price: For instance, one of the most spectacular failures in the grain trade in the year 1917 occurred in connection with a speculation in cash grain. The Superior (Nebraska) Corn Products Company was long several

thousand bushels of cash corn, and kept on buying corn. This was during the World War, and the market at that time suffered a big decline, entailing a large loss on the firm, and wiping out its assets. Many country elevators also lost, having bought the grain from farmers at the high price and sold it in good faith to this firm, which sales 'n many cases were cancelled.

The following two cases came to the writer's attention in Kansas. A young farmer, believing he could forecast the corn market, built a corn crib on a railway siding and bought 75,000 bushels of good corn at 18 cents. He held this till the next year and sold it for 62 cents. It was a speculation in cash corn. A young lady saved $125 from her year's wages as a school teacher. She wished to "invest" this, so, upon her father's advice she bought flaxseed which was of a very high grade, and cost $1.25 a bushel. This flaxseed was stored in her father's bin, storage free, until seeding time next year. Scarcity of good seed and local demand put the price up to $2.50 a bushel. Thus she doubled her money by her speculation. There are two typical cases of *successful* speculation. The question may be asked, who was injured by this speculation? And were these two speculators deserving of blame?

It is clearly a fallacy to connect speculation with future trading. It is likewise a fallacy to connect it with "margin trading" since this form of trading prevails generally in real estate, and is common elsewhere.

The early travelers in Chicago were impressed with the real estate speculation rather than with the grain speculation there. For instance, Harriet Martineau wrote of her visit to Chicago in 1834 in these words:

"I never saw a busier place than Chicago was at the time

of our arrival. The streets were crowded with land speculators hurrying from one sale to another. . . . It seemed as if some prevalent mania infected the whole people. . . . A poor man at Chicago had a preëmption right to some land for which he paid in the morning $150.00. In the afternoon he sold it to a friend of mine for $5000.00."

Or, jumping from that early day in Chicago to the year 1919, in the farming area tributary to Chicago we find the same "mania" for speculation in real estate. Says G. I. Christie, Ex-Assistant Secretary of Agriculture of the United States, to an audience of farmers:

"I want to say the greatest evil taking place right now is the speculation that is taking place in the farms. In our own state one farm changed hands six times in a few weeks. What does it mean? It means they are speculating with those farms. Right out in Iowa they are selling farms, and selling them again next week."*

The country newspapers of Iowa, Illinois, Nebraska and Kansas, at this same time were full of references of farmers selling their land at $200, $300, $400, or even $500 an acre, realizing large profits, and other farmers buying it. One farm was cited near Joliet, Illinois, costing $25,000 in 1911 and selling in 1919 at $72,000. It is unnecessary to dwell on this subject of land speculation longer than to say it is our best illustration of *unorganized* speculation. It is not subject to any known rules. It is not done in the full limelight of publicity. *Organized* speculation, such as is done on the organized exchanges, must be sharply differentiated from unorganized in at least three ways: (1) it is organized, that is, reduced to strict rules (published and known to all interested); (2) it is brought out into the open, on a compet-

* Quoted in *Price Current-Grain Reporter*, September 3, 1919, p. 15.

itive basis, where its nature is known and studied; (3) it is conducted in the light of full market information.

(c) **Speculation and Price Fluctuations.**—Men speculate because prices fluctuate. And if all the speculators in the world were dead, prices would still fluctuate. Yet how common is the belief that speculation is the cause of price fluctuation. This is indeed a strange confusing of cause and effect. As well say that where there are many umbrellas there is (for that reason) much rain: where there are many hospitals and ambulances there is (for that reason) much sickness.

We have commodities in which there is no speculation: yet there is price fluctuation. Take a government bond, for instance. There is stamped on its face in very plain figures just what its amount is. It will be paid in gold in full—no doubt about that. No speculators are trading in government bonds of the United States Government. Yet the price of these bonds fluctuates from day to day. For instance, here are the figures from the last annual report of the Comptroller of Currency of the United States:

United States Bonds—Monthly Range of Prices in New York, November, 1917, to October, 1918, Inclusive

(Annual Report Comptroller of the Currency. December 2, 1918. Vol. 2, p. 38, p. 39, Washington, 1919)

Coupon bonds of 1925—Range from 104 to 107½

Date		Open	High	Low	Closing
1917	Nov.	105 –106	105½–106	104	104
	Dec.	104	104⅛–105¼	104	104 –105
1918	Jan.	104 –105	104½–105¼	104 –105	104¼–105¼
	Feb.	104½–106	105 –106	104½–106	———
	Mar.	104⅝	104⅝	104½	104½
	Apr.	104½	105	104½	105
	May	105	105½–106½	105 –105½	106½
	June	105½–106½	105¾–107	106	106
	July	106	106½	106	106½
	Aug.	106	106½	106	106½
	Sept.	106	106½	106	106½
	Oct.	106	106½–107½	106½	106½–107

Panama 3s of 1961—Range from 80 to 85

1917	November	80	80	80	80
	December	84	84	80	80
1918	January	80	82	80	82
	February	80	80	80	—
	March	81	81	80	80
	April	80	80	80	80
	May	80	85	80	85
	June	85	85	85	85
	July	85	85	85	85
	August	85	85	85	85
	September	85	85	85	85
	October	85	85	85	85

Other United States Bonds

First Liberty Loan 3½s.	Range	97.30 to 102.40
4s of 1925		104 to 107.50
2s of 1930		96.50 to 98.75

It is interesting to note that the Liberty Bonds sold during April and May, 1920, as low as 82.

Since these bonds are legal investments for savings banks, trust funds, etc., they cannot be looked on as having their price fluctuations caused by speculators. They offer proof that prices fluctuate wholly independent of the activities of speculators.

Instead of causing fluctuations, speculation on the organized exchanges lessens fluctuations. One test we may apply to this statement is to take two commodities of similar nature, produced in many countries of the world, both used for human food and for animal feed,—one traded in for future delivery (*i. e.*, in the speculative market), the other not so traded in. Wheat and barley are such commodities. If we compare their extreme fluctuations in price on the Chicago market for a series of years, we find the fluctuations in barley are much more violent than the fluctuations in wheat. Oats are very similar to barley as to their general production and use. But future trading in oats tends to stabilize oats prices. A comparison of these three grains, wheat, barley and oats, can be made by studying the following table:

Cash price fluctuations by per cents, for 18 years, of wheat, barley and oats, on the Chicago Board of Trade, showing widest fluctuations in barley. (Extreme price ranges for each year.)

Year	*Wheat*	*Barley*	*Oats*
1899........	24.2 per cent	57.1 per cent	46.7 per cent
1900........	42.6 "	97.6 "	25.0 "
1901........	26.6 "	73.2 "	107.5 "
1902........	41.0 "	93.3 "	103.4 "
1903........	32.5 "	72.2 "	44.0 "
1904........	50.3 "	103.3 "	62.9 "
1905........	59.2 "	57.1 "	38.0 "
1906........	42.9 "	52.7 "	48.0 "
1907........	71.8 "	175.0 "	68.6 "
1908........	31.4 "	130.4 "	31.5 "
1909........	61.2 "	91.9 "	72.2 "
1910........	44.7 "	114.3 "	64.7 "
1911........	40.5 "	152.6 "	65.8 "
1912........	43.5 "	233.3 "	93.4 "
1913........	43.1 "	102.4 "	37.1 "
1914........	70.1 "	79.5 "	52.6 "
1915........	70.4 "	87.5 "	68.2 "
1916........	207.3 "	120.6 "	52.5 "

Only once during this period, namely, 1916, did wheat show a fluctuation of over 100 per cent; oats showed similar variation only twice (1901 and 1902); but barley showed such a price fluctuation eight times in eighteen years.

The question may be asked, why not compare the fluctuations in the price of wheat before future trading was started with the fluctuations in wheat after future trading was started? It is desirable that this be done, although other factors than future trading must be allowed for, particularly in the early years when transportation and communication were in poor condition. However, taking the price of wheat in the United States for a period of one hundred years, as the writer has done with great care, we find the price fluctuations before future trading to be more than twice as great as the fluctuations after future trading. To

get figures that were comparable, the price of wheat on the first day of the year at the office of the Van Renssalaer manor in Albany were used, covering a period of sixty years (1793–1852), and showing the fluctuations year by year and by ten-year periods. Then the price of Number 2 wheat on the Chicago Board of Trade, the first business day of the year for a period of forty years was taken, showing the fluctuations year by year and by ten-year periods. There were no organized grain exchanges in the country during the first period of sixty years. During the forty-year period, 1874–1913, future trading on the Chicago Board of Trade was very active. The figures used for the above conclusion are all found in Appendix 7. The available evidence all shows that the market had wider swings—bigger fluctuations—before the days of future trading than since the days of future trading. It also shows that at the present time there are many small, day to day fluctuations in the speculative commodities, but fewer wide swings than there are in the non-speculative commodities. (The term "non-speculative commodity" is here used in its purely technical sense as meaning a commodity not traded in for future delivery—not that it is not speculated in, for all cash grains are frequently speculated in.)

An interesting example of recent price fluctuation is that of wheat during the year 1919, during which time there was no speculation and no future trading in wheat, the price being "stabilized" at $2.26 a bushel by the federal government. In spite of the government guarantee of price, the pressure of demand for cash wheat put the price up over the $3.00 mark.

It seems fair to conclude, therefore, that speculation in grain on the organized exchanges lessens price fluctuations.

(d) **Influence of Speculation in Raising and Lowering Prices.**—Some twenty-five years ago, at a large and representative meeting of farmers a resolution was passed condemning future trading in wheat on the grounds that future trading lowered the price of wheat. Three weeks after this meeting, 500 members of the National Association of American Millers met in convention at Minneapolis and passed a resolution condemning future trading on the grounds that it raised the price of wheat. Apparently self-interest colored the views of both these groups. The truth lies halfway between these extreme views, namely, future trading (*i. e.*, free, open, competitive speculation) registers that price where meet in temporary equilibrium the competing buyers and sellers, expressing the competing forces of supply and demand. The difference between speculation and a "corner" will be discussed below.

The "Phantom Wheat" Question.—It is sometimes plausibly argued that the man who sells short a million bushels of wheat has sold phantom wheat, mere "wind," and that this "fictitious supply" of wheat must depress the market. There are two ways to answer this fallacy. The first is, that nowhere in the world is so much information on display, as on the Grain Exchange showing past, present and estimated future supply of wheat, actual visible supply, grain afloat for Europe, condition of the world's crops, condition of the world's markets, world's supply of wheat, world's probable demand for wheat. No trader is misguided by a supply of "millions of bushels of phantom wheat." The trader is a very practical person, else he ceases to be a trader. He is able to tell "phantom wheat" from real wheat. The second answer is, that in every corner of the market—when short selling is greatest (*i. e.*, when most

"phantom wheat" is sold), the *demand* for this "wind" exceeds the supply, and prices, instead of being depressed, are raised. If selling a million bushels forces prices down, buying the million should force prices up. The amount bought equals the amount sold. It is just as logical to reason that the demand (by buyers) for "phantom wheat" raises prices. Furthermore, the man who sells short—granting for the sake of argument that he depresses prices—closes out his trade by buying back what he sold; and this buying "phantom wheat" offsets his selling "phanton wheat." We have already seen in the case of corners (most of which failed) that the buyer of the long line of wheat was often unable to sell without putting the price down more than he had put it up. He was, in trade language, "able to corner the market but unable to bury the corpse."

Speculation which is under the influence of a corner or of manipulation fails, temporarily, to reflect real supply and demand values. The preceding history of the Board of Trade shows, however, that these disturbing factors are not countenanced by the Board and are becoming less and less important features of this market.

The daily fluctuations of the market price are often cited by speakers to prove that this price is "artificial," is not "sane," etc., because, it is argued, supply does not fluctuate overnight!* There are two fallacies here—one on the supply side and one on the demand side. No one knows exactly what the supply is: it is a matter of opinion—expert opinion, backed by official government crop estimates plus private crop reporting agencies of all kinds. But it is still an estimate, a mere calculation. And the estimate may change overnight, due to a news report. A report of black rust in the growing wheat, for instance, causes a drop in the *esti-*

mated supply and a concomitant rise in price: crop damage, insect pests, plant diseases, frost, drouth, hail, rain, etc., all have a certain weight in modifying the estimates of the merchantable supply of grain. Thus, with corn in 1917: the crop estimate was for the biggest corn crop in the history of the world. But wet weather made the crop largely unmerchantable. From week to week, the news came into the market that the corn was not keeping, and hence the "supply" figures often literally changed overnight. And as to the demand side of the market, it is perfectly obvious that market news from hour to hour greatly affects this side of the market. The consumer—the ultimate dictator of the market—has his mind (and his demand) influenced by both physical and psychological factors, which it is unnecessary to enumerate here. Hence the conclusion is forced on us that the choppy, small, wave-like movement of the future market is a true and sensitive barometer of the conflicting supply and demand forces.

An examination of these market fluctuations, and the reasons given therefor by the experienced market reporters, tend to confirm the statement that the fluctuations are not artificial, but do reflect supply and demand.

For instance, the following statements covering one week's trading on a falling market, are compiled from the reports of several of Chicago's leading market reporters. The aim of the statement is to state and explain the market fluctuations for one week.

December Corn. Chicago Board of Trade. Week August 25–30, 1919 (i. e., Monday to Saturday)

	Open	High	Low	Closing	Range
Aug. 25	141 –140½	143³/₈	140½	143³/₈– ¹/₈	2⁷/₈
" 26	143¼–142¾	143½	141³/₈	141¾– ⁵/₈	2¹/₈
" 27	142 –141½	142¹/₈	140¼	140¾– ⁵/₈	1⁷/₈
" 28	139⁷/₈–138½	139⁷/₈	136¹/₈	137¹/₈–136⁷/₈	3¾
" 29	137½–136½	139³/₈	135⁷/₈	139 –138¾	3½
" 30	138¾–138¼	138¾	136	136½– ³/₈	2¾

Monday, August 25

Price fluctuations—reasons.

Monday, Aug. 25. December corn. Open 141–140½ high, 143³/₈, low 140½.

Close 143³/₈–¹/₈ range 2⁷/₈.

Receipts—249 cars.

Closed high.

Sentiment of local traders is bearish.

Texas offering corn freely.

Rain in Kansas and Nebraska. Values declined early, but later rallied. Bears buy back at close—causing upturn.

Ten cars of new Texas corn, No. 3 white, were sold to-day to the Armour Grain Company to come to Chicago, ten days' shipment, at 189, or 11c over Chicago September.

Tuesday, August 26

143¼–142¾ 143½ 141³/₈ 141¾–⁵/₈ 2¹/₈ range

Receipts to-day 100.

To-morrow, estimated—125.

Visible supply—last week—decrease	415,000	bushels
week year ago	1,230,000	"
Total visible now	1,061,000	"

Closed lower.

Lack of outside interest in the market.

Local sentiment bearish—based on Texas corn offerings.

Little news.

Outside markets down about same as Chicago.

Kansas City reported shipping 25 cars old corn to Milwaukee and 20 cars to St. Louis on account of poor demand there.

The trade is marking time, pending developments.

Wednesday, August 27

142–141½ 142⅛ 140¼ 140¾–⅝ 1⅞

Receipts to-day, 148 cars.

To-morrow, estimated 135.

Down, due to selling by local traders.

Outside interest in market small: means lack of buying power.

Bad break in hog market.

Prospects of strikes in railway and steel industries.

Sentiment excessively bearish: news of a depressing character.

Thursday, August 28

139⅞–138½ 139⅞ 136⅛ 137⅛–136⅞ 3¾

Receipts to-day, 147.

To-morrow, estimated 157.

Closed 3⅝ lower than yesterday.

Liquidation from the opening: lack of buying support.

Texas offered corn in Chicago at 1.84. Cash corn is down 12 a bushel below high point of last week.

Hogs down, following break of $1.00 yesterday.

Public agitation to lower cost of living.

Market oversold.

Sentiment bearish—anticipating heavier receipts next week.

Cash corn 1 to 5c lower.

General market demoralization. Government fight on the Packers.

Majority of trade look for lower prices.

Friday, August 29

137½–136½ 139$^3/_8$ 135$^7/_8$ 139–138¾ 3½

Receipts to-day, 157.

To-morrow, estimated 128.

Closed 1$^7/_8$ higher than yesterday.

Kansas crop report forecasts short crop (56,500,000 bushels).

This report started shorts to covering.

Big broad, active market. Offerings absorbed by strong interests.

Previous Kansas Crop figures—July, 87,000,000.

August 1 (U. S.), 81,400,000.

Attitude of American Federation of Labor towards railway strike promised a much healthier labor situation.

Oversold condition.

Saturday, August 30

138¾–¼ 138¾ 136 136½–$^3/_8$ 2¾

Receipts to-day.

Monday, estimated.

Closed 2$^3/_8$ lower than yesterday.

Embargo on shipments of all grains to Atlantic and Gulf ports. (Congestion at seaboard terminals: lack of vessels.)

Outside interest in market very limited.

Crop reports indicate 2,900 million bushels, with quality the best in years.

Month and week-end liquidation.

Moderate increase in receipts: predictions of heavier run during coming week.

Market is a scalping affair.

If hogs continue weak, farmers will sell corn and make more than by feeding it to hogs. A break in cash corn would likely be reflected in lower futures (Hoyne & Company).

To carry this subject one step further, let us examine the report on one day's market, as given by the press reporters

who devote their entire time exclusively to this one subject. They can qualify as "experts" in this field, after a number of years of service. The quotations given at length below are from an evening and a morning Chicago paper, both of which maintain competent grain market reporters. A careful study of these interesting reports throws considerable light on the actual doings of the market.

Chicago Market, September 19, 1919—Fluctuations and reasons therefor. (As reported by the *Chicago Daily News*, September 19, 1919.)

LOCALS UNLOAD LONG CORN, CAUSING BREAK

Trade is Colorless, with Outside Interest Light; Oats Close Easier

Corn finished ½ at 1 1/8c lower. It was colorless market most of the session. Pit traders were bullish and bought on the breaks, but they received little outside assistance and their efforts to realize on their purchases were responsible for the closing break. Oats were 1/8 at 3/8c lower. Rye finished unchanged to ¼c higher and barley ½ at 1 1/8c higher.* Provisions closed lower. Local cash sales were 126,000 bu. of corn, 131,000 bu. of oats and 3,000 bu. of barley. Sales of 50,000 bu. of rye were reported to exporters, but some shippers said that they offered rye and failed to get an attractive bid in return.

Active futures ranged as follows:

			Closing	
Corn	*High*	*Low*	*Sept. 19*	*Sept. 18*
Dec.	1.26 1/8	1.23	1.23 7/8–¾	1.24¾–25
Dec.	1.26 1/8	1.23	1.23 7/8–¾	1.24½–25
May	1.23¾	1.21	1.21 –5/8	1.22½– ¾

* Barley. Future trading in barley, begun in 1918, is insignificant in volume.

Oats				
Sept.	.67¾	.66$^{7}/_{8}$	.67$^{3}/_{8}$	.67½
Dec.	.70½	.68$^{7}/_{8}$	.69$^{5}/_{8}$–½	.69¾– $^{7}/_{8}$
May	.72¼–$^{3}/_{8}$	.71	.71$^{5}/_{8}$–½	.72 –71$^{7}/_{8}$
Rye				
Sept.	1.43	1.42	1.42¼	1.42
Oct.	1.44½	1.43	1.43½	1.43¼
Dec.	1.48¾	1.47	1.47¼	1.47¼
Barley				
New Sept.	1.31½	1.31	1.31½	1.30
Dec.	1.21	1.20	1.21	1.20½

Opening prices: September corn, $1.48¾; December, $1.25½; May, $1.23½ at ¾. September oats, 67½ at ¾c; December, 70$^{1}/_{8}$ at ½c; May, 71$^{7}/_{8}$c. September rye, $1.43; October, $1.44½; December, $1.48½. Barley, new September, $1.31; December, $1.21.

Closing prices a year ago to-day were: October corn $1.50¾ at $^{5}/_{8}$; September oats, 73c.

It was a two-sided market in corn and this accounted for the choppy trend of prices. The start was higher, due to further covering by shorts and the buying by pit traders, who were inclined to take the buying side because of the strong close yesterday, and the further wet weather, which was construed by many as a bull factor, inasmuch as it is likely to retard the movement from farms. The bulges brought out good selling, most of it by commission houses and for eastern account. This caused locals to unload and a break followed, but purchases on the dip were of sufficient volume to absorb the surplus and prices recovered to within a small fraction below the previous close. The threatened steel strike and the fact that it may involve other industries, advices yesterday saying that the Lake Seamen's union was taking a strike vote to aid the steel workers, was regarded as a bearish factor and was responsible for much of the selling on the advance. Country offerings of corn to

arrive are just fair. A well posted cash handler said he had advices from one Iowa station of 50,000 bu. old corn being held there because of the inability to get cars to move it. Local receipts to-day were estimated at 165 cars. Overnight domestic demand fair, with sales of 90,000 bu. reported. A Philadelphia grain man wired that Ohio and Indiana points were offering old corn there 4c under Chicago. Sales of 50,000 bu. of contract corn were reported to go to store.

The trend of oats prices was similar to that in corn. Higher opening was due to buying by pit traders and some of the seaboard houses. Local bears and commission houses with eastern connections were good sellers on the upturn. The buying on the dips was good and prices held fairly steady at the decline. The wet weather is likely to interfere with the movement. Some of the cash men reported a little oats bought to arrive overnight, but on the whole country offerings to arrive were light. Overnight shipping demand was not so urgent as shippers advanced their prices materially, anticipating a strong opening this morning; sales reported were 72,000 bu. Local receipts were estimated at 110 cars.

Cash Grain Markets

Winter wheat—Steady. Sales track Chicago: No. 5 red, \$2.12; No. 4 red, \$2.16 at 2.16½; No. 3 red, \$2.20 at 2.21½; No. 2 red, \$2.23½ at 2.24; No. 4 hard, \$2.16 at 2.16½; No. 3 hard, \$2.20½ at 2.21; No. 2 hard, \$2.23½ at 2.24.

Spring wheat—Steady. Sales track Chicago: No. 4 northern, \$2.28; No. 3 northern, \$2.24 at 2.36; No. 2 northern, \$2.45; No. 1 northern, \$2.45; dark, \$2.67 at 2.69.

Corn—1 at 3c higher. Sales mixed lots.

Chicago Market, September 19, 1919—Fluctuations and reasons therefor. (As reported by Charles D. Michaels, *Chicago Tribune*, September 20, 1919.)

LOCAL TRADERS SWITCH TO BEAR SIDE OF CORN

Profit Taking by Longs Helps them Depress Prices

By Charles D. Michaels

Local sentiment was mixed on grains, with the bears the most aggressive buyers and sellers at times, while commission houses were fair buyers on weak spots. Prices moved within more reduced limits, and, although higher early, finished weak, with corn off ½ to 1c, oats $^1/_8$ to $^3/_8$c, and rye unchanged to ¾c higher in Chicago.

In the southwestern corn markets last sales were 1c higher for September at Kansas City and $^5/_8$ to 1¼c lower on other months. Oats there were off ¼ to $^3/_8$c and in Minneapolis unchanged to ¼c lower, while Winnipeg was $^1/_8$ to $^5/_8$ c lower.

Locals Bearish on Corn

Local traders generally switched to the bear side of corn overnight due to the failure of stimulating news to develop, and with the assistance of heavy profit taking by longs, especially at $1.26 for December on resting orders, were able to depress prices 2¼ at 3$^1/_8$c from the high point at the opening, with the close on a moderate rally. December finished at 1.23^7/_8$, and May at 2c discount, while September was $1.47. Trade in the latter was much smaller, and it showed more strength than the deferred deliveries, although 50,000 bu. mixed were sold to go to store for delivery.

Impending strike of steel workers had considerable effect on pit sentiment, but it was very noticeable that at $1.25 for December and on every cent decline there was a good class of commission house buying on resting orders. At the high point the new crop futures were up around 10c from the recent low, which many thought was sufficient for the time being.

While country offerings were slightly larger, the eastern demand was not as keen as of late. Sales for shipment aggregated 125,000 bu., including 10 cars of new for December shipment at $1.50, delivered

New England points. Sample values were unchanged to 3c higher, with $1.50 paid for No. 1 white and yellow, but they were wanted for special purposes and sold on the billing. Receipts 157 cars.

Strong Undertone in Oats

While many of the local traders were bearish on oats, they failed to fully reflect the weakness in corn and closed with only fractional losses, with September 67$^3/_8$c, December 69½c, and May 71½c. September gained ¼c on the December, and the cash situation is becoming tighter due to the limited movement of the cash grain from the interior. Eastern demand, however, was slower, with sales of 175,000 bu. Choice No. 2 whites sold at 3 to 4c over September, a wider premium than has existed for some time.

At one time oats broke only ¼c, while corn dropped 2¼c. On the breaks there was commission house buying, and the pit shorts covered frequently. Sample values were unchanged to 2c higher, with receipts 85 cars. Deliveries 60,000 bu.

Seaboard Buys Rye Futures

Trade in rye was less active, but the market had a firm undertone with some buying early that was attributed as for seaboard account, and a possible reflection of export sales, but the latter could not be confirmed. Futures closed unchanged to ¼c higher, reacting toward the last with corn. No. 2 on spot was ½ to ¾c under October with sales at $1.44. Receipts, 12 cars.

Heavy weight barley was in demand, and with light offerings full prices were readily obtained. Lower grades were neglected. Feed dealers bought moderately and this kind was quoted as 1 to 2c higher by some, while others said it was unchanged. Spot sales were at $1.17 to $1.32, with receipts 21 cars.

Timothy seed advanced 25c for cash, with sales to $9.00 to $10.75. March, $12.50 bid, per 100 lbs. Toledo 5c lower; October, $5.55 per bu. of 45 lbs. Clover seed unchanged. Country lots, $30.00 to $40.00 per 100 lbs. Toledo 45c higher; October, $29.95 per bu. of 60 lbs.

WORLD'S GRAIN MARKET NEWS

A very weak feeling prevailed in the grain markets late yesterday. Under ordinary conditions such a condition would have been taken as a possible forerunner for an upturn, as a few traders observed. The rank and file of the local element were bearish and predicted lower prices, basing their belief on the possible general strike of steel workers, which, should it develop proportions claimed by the union leaders, will unsettle business and affect all markets by intimidating buyers. Most of the selling yesterday was attributed to local operators, while a number of the commission houses appeared to have buying orders on all breaks. Under conditions like the present all the depressing factors stand out strongly and courage is needed to be much of a bull.

It was asserted by a trader who had studied the market closely all day that the corn and oat markets were oversold, and any attempt to cover might send prices higher for a time. One commission house asserted that the oat market was overbought, while a pit observer said it was the reverse, and that the absence of pressure of cash offerings made short sales unsafe on breaks. It was possible to get a greater variety of opinions than usual.

"The weight of the corn itself must be felt before prices decline much further," said one commission man. "Speculative holdings have been well liquidated."

There has been considerable buying of German marks by some of the members of the grain trade, who see a chance of making an excellent profit. With the par value of a mark 23.8c, they cannot see how it will decline much more now that it is under 4c. Cables from Europe of late have indicated that the recovery of business in Germany is probably more rapid than in England and France. The buying has been based simply on the speculative possibility. Calls good nine months have been secured in some instances.

Reports of export business in oats were in circulation yesterday. It is understood that they arose from a canceled London order, the original seller promptly reselling the grain to another exporter.

Fresh business is regarded as out of the question at the present time. From 1907 to 1912 the average exports per year from the United States did not exceed 4,000,000 bu. In 1913 they were 33,759,000 bu. The record was made for the year ended June 30, 1918, when 105,881,000 bu. were exported. For the year ended June 30, 1919, they were 96,360,000 bu.

Good rains have fallen over the west and southwest the last two days. In Nebraska they ranged from a sprinkle to 4.30 inches. Red Cloud had 6.93 inches, and several points had two inches or more. The benefits will be two-fold: reviving pastures and putting ground in shape for plowing and winter wheat seeding. A message from Geneva, Neb., said: "Half inch rain, wetting the ground for first time in three months. Pastures greatly benefited. Paxton, Neb., says rain has put the ground in fine shape for fall plowing, and enormous acreage of winter wheat is being seeded as fast as the ground can be prepared. Corn here is out of the way of frost and a big crop assured."

A Board of Trade membership sold yesterday at $10,300 net to the buyers, a drop of $550 from previous trade.

CASH GRAIN NEWS

Shipping sales of corn were 125,000 bu. and oats 175,000 bu. Deliveries on September trades were 60,000 bu. oats and 6,000 bu. rye.

Spring wheat was in good milling demand and all good to choice grades were readily taken at full prices, with a few cars of choice dark northern at a small advance. Winter grades were at basic prices to 1c over. Arrivals here were 408 cars. Withdrawals 336,000 bu. and shipments by lake 280,000 bu. and by rail 226,000 bu. Exports from the seaboard were 787,000 bu. Minneapolis was unchanged to 5c lower. Arrivals 405 cars, against 540 cars a week ago and 377 cars last year. Duluth had 82 cars, against 804 cars last year. St. Louis and Kansas City were unchanged.

Corn sold readily with offerings not large and arrivals 157 cars

here. Prices unchanged to 3c higher, with 50,000 bu. No. 2 mixed sold to go to store. Mixed was September price to ½c over, white ½c over, and yellow 1½c over. At the last some No. 3 white sold at ½c over September. Peoria 1 to 2c higher, with 17 cars in. St. Louis 1 to 2c up, and Omaha 3 to 5c higher. Kansas City little changed, with trading there light.

Oats sold readily, with prices unchanged to 2c higher. Choice 33 and 34 lb. No. 2 whites brought 3 to 4c over September. The ordinary No. 3 whites sold at 2¼c under December. Arrivals 92 cars. Peoria had 3 cars and prices were ½ to ¾c higher. St. Louis ½c higher and Kansas City 1c lower.

Cash prices for grains in the leading markets follow:

CORN

	Chicago	*Omaha*	*Peoria*
No. 1 mx........	1.47¾ to 1.49	....	1.48
No. 2 mx........	1.47¾ to 1.48½	....	1.48
No. 3 mx........	....	1.45	....
No. 4 mx........	....	....	1.47
No. 6 mx........	1.44½ to 1.45	....	....
No. 1 yel........	1.49 to 1.49½	....	1.49
No. 2 yel........	1.49 to 1.50	1.45	1.48½ to 1.49
No. 3 yel........	1.48½	1.45	1.48
No. 4 yel........	....	....	1.47
No. 6 yel........	1.44½ to 1.45	1.43	....
No. 1 wh........	1.48½ to 1.50	....	....
No. 2 wh........	1.48½ to 1.49	....	1.48
No. 3 wh........	1.47 to 1.47½	....	....
No. 6 wh........	1.45	1.43	....
	Milwaukee	*Kansas City*	*St. Louis*
No. 2 mx........	1.45½	1.48	1.48
No. 3 mx........	1.45½	....	....
No. 1 yel........	1.46½	....	....
No. 2 yel........	1.46½	....	1.49
No. 3 yel........	1.46½	....	1.48
No. 2 wh........	......	1.48	1.49

	Minneapolis	*Buffalo*	*Toledo*
No. 3 yel	1.44 to 1.45	....	1.51
No. 4 yel	1.42 to 1.43	....	....
No. 3 mx	1.43 to 1.44	....	....

OATS

	Chicago	*Kansas City*	*St. Louis*
No. 2 wh	69¼ to 71	..	69 — 69½
No. 3 wh	66¼ to 70	67	68 — 68½
No. 4 wh	65 to 68	67	67

	Milwaukee	*Omaha*	*Minneapolis*
No. 2 wh	68¼ to 69¾	.....	64⅝ to 67⅛
No. 3 wh	66¼ to 69⅜	66 to 66½	64⅛ to 66⅝
No. 4 wh	65¾ to 68¾	65½ to 66	61⅝ to 64⅝

	Buffalo	*Toledo*	*Peoria*
No. 1 wh	75	....	....
No. 2 wh	74½	72 at 74½	....
No. 3 wh	73½	....	67½

RYE, BARLEY AND FLAX

	Rye	*Barley*	*Flax*
Chicago	1.44	1.15 to 1.32	....
Milwaukee	1.43 — 1.44	1.23 to 1.39	....
Minneapolis	1.39½	95 to 1.26	4.81 to 4.87
Duluth	1.42½	98 to 1.25	4.88

NEWS OF THE CROPS

Plowing for winter wheat is 15 per cent less than normal for this season, as shown by reports to the *Modern Miller*, and is 35 per cent less than at this time last year. The delay was caused by drought and hard ground. Plowing for spring wheat has been comparatively small so far, although farmers have put in less time thrashing and moving wheat than ever before at this season.

Wheat thrashing in the southwest is delayed by scarcity of cars and thrashing crews. Much wheat is being piled on the ground.

It is expected that there will be a falling off in the wheat movement, as farmers say they intend to hold wheat for higher prices. Corn is mainly out of the way of frost.

Practically all of the corn is out of danger from frost, according to the American Steel and Wire Company's weekly report. Much of it is in shock, and silo filling is progressing rapidly. Owing to dry and hard soil fall plowing is much delayed and the wheat acreage will be greatly lessened.

CHICAGO GRAIN RECEIPTS

Inspection of grain by cars for Friday follows:

	Nos. 1 and 2	*No. 3*	*No. 4*	*No grade*	*Total*
Hard	51	47	43	14	155
Red	79	83	20	9	191
Mixed	11	7	8	2	28
Spring	12	10	9	3	34
Totals	153	147	80	28	408
Corn	130	8	..	19	157
Oats	21	61	3	..	85
Rye	6	3	3	..	12
Barley	..	9	7	5	21

GRAIN STATISTICS

Argentine exports of grain the last week aggregated nearly 8,000,000 bu. Details follow:

	Wheat	*Corn*	*Oats*
This week	3,421,000	3,825,000	467,000
Last week	4,706,000	2,628,000	418,000
Last year	1,233,000	647,000	636,000
Since Jan. 1	74,993,000	50,197,000	10,408,000
Year ago	102,130,000	12,557,000	21,350,000
Visible supply			
This week	1,850,000	4,800,000	....
Last week	1,850,000	4,400,000	....
Last year	3,300,000	3,960,000	....

North American exports of wheat and flour are holding up well despite the slow unloading of boats at European ports. Details, as compiled by Bradstreet's follow:

	Wheat and flour, bu.	*Corn, bu.*
This week	8,146,000	42,000
Last week	8,010,000	50,000
Last year	4,438,000	72,000
Since July 1	79,961,000	754,000
Year ago	62,511,000	7,213,000

PRIMARY RECEIPTS

Primary receipts of grain yesterday, with the last three ciphers omitted, follow:

	Receipts			Shipments		
Western Points	*Wheat*	*Corn*	*Oats*	*Wheat*	*Corn*	*Oats*
Chicago	610	255	317	506	183	193
Milwaukee	119	46	63	3	4	25
Minneapolis	535	10	69	224	7	103
Duluth	438	...	...	...	..	...
St. Louis	356	38	98	244	20	62
Toledo	53	3	8	14	1	7
Detroit	13	14	9	...	..	6
Kansas City	393	13	15	211	6	25
Peoria	25	59	27	28	39	59
Omaha	132	10	6	92	20	22
Indianapolis	23	44	45	14	19	7
Totals	2,697	492	657	1,338	299	509
Week ago	2,502	602	682	886	282	569
Year ago	2,742	1,061	1,291	1,379	565	525
Seaboard						
Totals	787	30	297	747	...	101
Year ago	537	10	66	296	...	170

These detailed and extended quotations represent the amount and kind of market information available to every trader every day on the Chicago Board of Trade, and available, furthermore, to the general public. This illustrates how well the Board performs one of its original functions, namely, "to acquire and to disseminate valuable commercial and economic information." This quotation also throws some light upon the fallacy of "phantom wheat" depressing prices or otherwise affecting the market.

Judging the market by what it does and by the way it acts, the conclusion is warranted that the bulls and bears put on the brake: if the bear feels the price is too high, he sells short—putting the brake on a further rise; if the bull thinks prices are low, he buys, putting the brake on a further fall. Thus the choppy market, between bulls and bears, full of small fluctuations but free from wide swings not justified by crop conditions.*

* Contrast the Chicago market—with abundant information every hour concerning world markets, with Argentina's market—with dearth of market information, and a proposed fortnightly service. The following quotation from our official consular reports makes clear the situation:

"Investigation of Grain Markets in Argentine. Proposed Corn Commission"

"The condition of the corn market is regarded as serious. The stock on hand is not large, and the quality is good, but the price is low. This depreciation is attributed not only to high freights and limited demands from consuming countries, but to the fact that individual producers are not well informed regarding world markets, and are unable to withstand the concerted action of a few buyers. It is recommended that the Government establish, through the Minister of Agriculture, a fortnightly service of official information on world markets. It is also recommended that the President appoint a special commission to accept consignments of corn from farmers and merchants for sale and

(e) **Corners.**—An artificial corner of the market occurs when the buyer has intentionally bought more grain than the short seller can deliver. A natural corner of the market occurred during the World War (in April and May, 1917) when the government grain buyers, buying contracts in May wheat, had purchased more contract grade wheat than was available for delivery. The situation was temporarily acute in Winnipeg and Chicago, where the future contracts were mostly placed. The allied governments in the end accepted much wheat below contract grade, at a discount. Such a corner is wholly free from manipulation or wrong intention. It was due to the emergencies of war. The artificial corner —the deliberately planned corner—has already been described in this report. Some experts in Grain Exchange problems, such as John Hill, Jr., consider only those corners artificial in which the operator takes steps to impede and check and make difficult the delivery. For the "natural corner" he blames only the short seller.

The popular fallacy about corners is that they are the fruit of the grain exchanges; that before we had grain exchanges we had no corners; and that should grain exchanges be abolished corners would cease. We may classify these beliefs as "superstitions," since a superstition is defined as a belief not founded on facts.

It is not necessary to ransack many pages of ancient history to find that corners were common two or three thousand

shipment. This commission would obtain credit from national banking institutions, with the corn as security, and it would advance 4 pesos ($1.70) per 100 kilos as a maximum on the corn received for sale. Upon receipt of proceeds from the sale of the corn, all accounts would be liquidated. This measure is recommended for immediate adoption."

Daily Commerce Reports, September 7, 1916, p. 903.

years ago. Just as an illustration of this, take the writings of one of the world's greatest thinkers of all time—Aristotle. Writing in Greek about 300 years before Christ, he pictures two corners which seem almost modern in their setting, even to the use of "margins."*

"He (Thales) knew by his skill in the stars while it was yet winter that there would be a great harvest of olives the coming year; so having a little capital, he gave earnest money for the use of all the olive presses in Chios and Miletus, which he hired at a low price because no one bid against him. When the harvest time came, and many wanted them all at once and of a sudden, he let them out at any rate which he pleased, and made a quantity of money."

"There was a man of Sicily, who, having money deposited with him, bought up all the iron from the iron mines: afterwards, when the merchants from their various markets came to buy, he was the only seller, and without much increasing the price he gained 200 per cent."

It seems that human nature has not changed much since the days of Aristotle. At any rate, the economic history of different peoples continues to record corners in all sorts of commodities, and will continue to do so, until proper machinery is created to control corners, governmental or otherwise. One school of thinkers always says about all problems: "Let the government do it." The writer claims some familiarity with the government, and his contention is, that so far as corners are concerned, the grain exchanges themselves suffer most and profit least by corners, and hence may be depended on to work out the machinery necessary to end this evil.

* *Aristotle's Politics* (Jowett's translation), p. 48.

But to submit further evidence of corners, before the days of the exchanges.

Coming down to our own country, we may give a few quotations from the outstanding economic authority of the period following the War of 1812, namely, *Nile's Weekly Register*.

These quotations are worthy of very careful study, and the sophisticated reader will read much between the lines.

Very Late from England

Everybody was on tip-toe in Baltimore on Thursday last. Every one was asking "what's the news?" Expresses had arrived in the preceding night and others were despatched with great haste and mystery. The speculators were abroad; flour immediately rose \$3 per barrel, wheat was up to \$3 per bushel; corn at \$2, and oats at \$1.25. No one seemed to know why this hurly burly was raised—there was said to have been an arrival at New York in a very short passage—it was said that there was a revolution in England—it was said. . . . What was not said? Curiosity made up stories to gratify itself, and anything, probable or improbable, was said. The only fact ascertained was, that the knowing ones were purchasing up all the flour, etc.

Then we heard that the Harlequin, formerly an American privateer, had arrived at New York from Liverpool—that, on the Saturday previous to her sailing, she had not a mast standing, and was every way unfitted for sea, but that she sailed on the following Monday, all things being prepared in the interim of two days, and was towed out of the harbor by a steam boat. She was ballasted with salt, and brought no letters or papers that had been made public. She was first reported to have had a passage of 28 days—this was denied, and her passage was given at 48 days—but the fact was, that she left Liverpool on the 14th of October. Thus the thing was twisted and turned in New York, exciting the same desires and uncertainties that it did in Baltimore.

Just after this, it was said to be ascertained that there would be a scarcity in England, and that the import of flour and grain would be immediately permitted. But could this fact be so suddenly ascertained?—would flour bear the cost here of $14 per barrel?—Were not the crops in some parts of Europe, in Poland and Sicily, especially (its great granaries), abundant?—etc. All were lost in conjecture; but it was generally agreed that some great event had taken place!

Thus the matter stood on Thursday evening. The mail of Friday morning settled the business down into this—that it was a mere commercial speculation—a manœuvre to buy or to sell some certain sorts of commodities; and letters from England of the 14th of October were published, saying it was concluded that the crop would be short by a third—that American wheat would sell for 16s per 70 lbs., and flour at 65s per barrel. If the crops be really one-third of their usual quantity short, greatly, indeed, must the distresses of the people be increased! Ireland too, which last year had an abundance, in consequence of the coldest and wettest summer ever known (there were only 5 or 6 days favorable to the harvest) will be exceedingly straightened.

The bubble seems to have burst, and speculation is already at an end here. It is not believed that anything important has transpired in Europe. Flour is falling, and probably will be at its former price in a day or two. The moral honesty of this mercantile hoax is very questionable. *Niles' Weekly Register*, Vol. XI, p. 189. Nov. 16, 1816.

Spain and Portugal are quietly proceeding to the organization of their newly acquired rights and liberties, and France is still. Several letters from England give doleful accounts of the state of the wheat crop—in consequence of a long season of wet and damp weather, it had very generally grown in the ear. This caused some rise in the price of flour at Baltimore—as high as six dollars per barrel was asked on Tuesday last—on Thursday, in consequence of later intelligence which came on from New York by express, eight dollars were asked, which price it still nominally maintains; but we have not

heard of any sales, and there is but a small quantity in market. Indeed, we apprehend that, from the low price of wheat last year, which checked its cultivation in the present, as well as from the short crops at the late harvest, we have not a great deal to spare, unless there is much of it far in the interior or in the western states. We are not satisfied, however, that the whole matter is anything more than the acts of speculators. We have been oftentimes amused with such reports from England; but one of the passengers in the ship that brought the news and her owners, have made heavy purchases of flour at New York and Philadelphia; at the latter, sales were made at seven dollars, and orders are said to have been received to purchase large quantities at eight. The passenger is stated to have left the ship, so that he was in New York incognito a whole day before she actually arrived, during which he drained the market. *Niles' Weekly Register*, Vol. XXI, Oct. 27, 1821, p. 129.

Great Britain. It appears certain that the crop of wheat has been exceedingly injured by successive rains, and that a great advance had taken place in the price of flour—Thirty-five shillings (nearly $8), per barrel had been offered at Liverpool for a cargo of Philadelphia flour and refused—38 to 40s. asked. The harvest on the continent is also reported to be very short and much damaged by the rains. *Niles' Weekly Register*, Vol. XXI, Oct. 27, 1821, p. 144.

One Week Later

Flour. We are much inclined to believe that the late rise in the price of this article had little more than the spirit of speculation for its foundation. The real sales made in Baltimore were of a small amount, and both buyers and sellers are now at a stand—the price of the commodity is nearly nominal, except what is sold for domestic consumption, which is various and uncertain. Later advices from Europe are impatiently waited for.

There are verbal reports by an arrival at New York, a day or two later from Liverpool, that the crops were turning out better than was expected, and that the market had not advanced. *Niles' Weekly Register*, Vol. XXI, Nov. 3, 1821, p. 145.

One Week Later

There is an arrival at New York that gives Liverpool dates of the 22nd Sept. No particulars of importance have yet reached us, except unqualified assurances that sales of wheat and flour were dull, and that the ports cannot open. They had fallen back to their old prices.

Some sales were made at Baltimore during the present week at seven dollars—the real price here this day does not exceed six and a half—and probably is less. *Niles' Weekly Register*, Vol. XXI, Nov. 10, 1821, p. 161.

FLOUR AND GRAIN. There has been much fluctuation in the price of these articles during the present week. The "best Howard street flour" had fallen back to \$7.75, and was dull—but on the arrival of accounts from England to the 11th October, advanced to \$8.75 and \$9.25, by the quantity. Wheat, on Monday last, was sold at from 1.85 to 2 dollars—old corn at 61 cents, new 50 to 55.

The British accounts are not to be relied on. Without entertaining any disposition to deceive, ardent speculators (as well in commerce as in politics), deceive themselves and mislead others. Whether the crop in England and on the continent, is really much short, we think cannot yet be fully ascertained. Old wheat was selling at Liverpool from 11 to 11s. 6d. per 70 lbs.—equal to about 9s. 6d. per American bushel of 60 lbs., and American flour at 50s. per bbl. duty paid, which latter, at the then fixed average price of grain, was 14 shillings—say 36 shillings, equal to 8 dollars per barrel for the flour. It is a subject about which we do not often venture our advice, but we think that if the farmers can obtain two dollars a bushel for their wheat, they ought to sell every grain that they intend to spare.

There has been much bustle in the flour market in Baltimore—the streets seem as if filled with wagons and drays loaded with it and, no doubt, the same parcels have rapidly passed through many different hands. A large quantity, however, has been sent away—chiefly coastwise.

The following extract of a letter from Liverpool, dated October 7, is important just now—

"There has been recently considerable speculation in the grain market—but, whether the opinions now getting into operation are founded correctly, will require some time to decide—in the meantime, I hope the farmers of the middle states will be getting clear of their superfluous stock at a good price.

"The crop of potatoes in Ireland has been uncommonly abundant, more so than for some years, which will leave the whole of the wheat crop applicable to this country—and the supply from that quarter is immense—What designing speculators can accomplish on public opinion, has been tested in 1825, and has shown the little dependence that can be placed on estimates of interested parties—and if the fears now prevailing of deficiency be just, the government has exhibited a gross ignorance of, and inattention to, the true state of the country; in not earlier providing for so important an exigency."

The *London Free Press* says—"Bread is daily advancing and the present prospect is that it will advance to a price far beyond the reach of the mass of the community"—that "the French are buying up corn everywhere on the continent"—that of "the state of the manufacturers we have most disastrous tidings"—that "money is abundant in the hands of a few," but becoming excessively scarce "with the middling classes"—that Ireland is in an alarming condition, "the violence of the Orangemen exceeding that of the Catholic leaders;" but these things being mixed with complaints against the government, induces us to suppose that they may be exaggerated. It is certain, however, that there has been a considerable rise in the price of grain—that Ireland is greatly disturbed, and that many are asking themselves the question, What's next?

Since the preceding was in type, we have received, by way of New York, extracts from English papers of the 18th October. *The importations of flour and grain had been heavy—the price had considerably declined, and was yet falling, and large quantities were shipping for the north of Spain, etc. And so, we fear, endeth this nine*

hundred and ninety-ninth British bubble, extending itself into the very interior of our country and injuring many innocent persons. Further advices, however, should be waited for to determine the real state of things. As speculation puffed-up the price, so speculation may have effect to reduce it, too suddenly—or to too great an extent. *Niles' Weekly Register*, Vol. XXXV, Nov. 22, 1828, p. 193.

These quotations show how easy it was for speculators to manipulate the market, and exploit the lack of market information generally prevailing.

The theory of organized speculation is that such market manipulation is made increasingly more difficult, with the better dissemination of market news, and the better enforcement of rules against manipulations and corners.

The Omaha Grain Exchange was opened February 1, 1904. It is a significant fact that certain strong interests in that market, fighting farmers' elevators and other so-called "irregular" country houses, were opposed to opening an organized exchange in Omaha. For an organized exchange meant certain definite rules, adopted by the majority. The organized exchange meant protection to the country shipper.

The tobacco crop represents a staple agricultural commodity, in which there is no organized exchange, no "future trading" on any organized exchange. The question may be asked, is this market harder to corner, harder to manipulate, than the wheat market where the speculators stand face to face in the pit and shout their bids and offers at one another?

That all is not well with the tobacco market is a matter of common observation. The situation is made somewhere concrete for us in the following testimony of two planters, before a Committee of the United States Senate.

F. G. Ewing.—"It has been the custom for the past four years for one buyer to come to a barn and make one bid on

that tobacco, and generally speaking, he does not come any more. He comes and says, 'I will give you 4 1/2 cents,' or 'I will give you three and one,' or 'I will give you something else;' and it is that or nothing. Most frequently he will not have another opportunity of selling."

Charles H. Fort.—The buyer, "came to my house and made me an offer for my tobacco, and I knew that I had to sell, for there was no other way in the world to sell it, no other recourse, and I sold it to him. He was on his way to one of my neighbors. We had telephones in the house and I telephoned to my neighbor before this buyer got to his house, and told him that he had better take the first offer; that unless he did, he would knock him down. The neighbor could not take the offer that day, because his share hands and tenants were not convenient, and he could not take the liberty of selling their tobacco without their consent and authority. So the buyer said to him, 'You had better take this offer; when I come to-morrow I will give you less.' In two days from that time this neighbor went to accept the former proposition and he knocked him down a hundred dollars on a $600 crop; and, gentlemen, he kept going lower and lower until he got $250 below the first offer."*

To come back to the original question, What is the relation of the Chicago Board of Trade to corners? The Board furnishes machinery, the abuse of which promotes corners. The history of the Board, however, shows that the Board has the machinery for controlling corners, so far as the Chicago market is concerned; and that in recent years the Board has exercised this power. In short, the Board lessens corners by its machinery of control.

* Hearings before subcommittee of the Finance Committee, U. S. Senate. 59 Cong. 2 Sess., Senate Doc. No. 372, pp. 54, 117.

(f) **Manipulation.**—The subject of manipulation has already received considerable attention in connection with the discussion of corners. Webster defines manipulation in these words: "Manipulate—to work up and down in price by transactions other than those made bona fide or in the ordinary course of business, as by cash sales, cornering the market, spreading fictitious reports, etc., to rig."

To "rig the market" is defined as to "manipulate the market."

The underlying idea of manipulation is the deliberate and conscious influencing of price through dissimulation. A vigorous campaign of advertising may bear or bull a stock or a grain. Is this advertising manipulation? Not so long as it is free from deception and fraud. There must be some deceit. Influencing the grain market by spreading false crop reports (easily done fifty years ago) is manipulation, and is of course forbidden by Board of Trade rules. Influencing the grain market by spreading true reports of crop damage is not manipulation.

The following instance of "influencing price" is submitted to the reader's judgment, and left for him to decide whether or not it constitutes manipulation.

The following telegram was sent by the Illinois Agricultural Association on September 15, 1919, to every one of the county agricultural agents in Illinois, to be passed on by them to the 50,000 farmers constituting the membership in the State Association; the telegram was given a prominent place on the front page of Chicago's leading morning paper, so that when the Board of Trade opened at 9:30 every trader was familiar with its contents. It had likewise been wired to New York, Minneapolis, Kansas City, and other market centers, so that the whole trade were subject to its influence.

(Copy)

Chicago, Illinois, Sept. 15, 1919.

Wm. G. Eckhardt,
De Kalb, Illinois.

Manipulation grain market by Board of Trade and agitation by government against high cost of living temporarily unsettling market. Suggest you notify entire membership your county not to be stampeded but hold grain awaiting sane market. In so far as possible this should apply to live stock.

(Signed) H. J. Sconce, President,
D. O. Thompson, Secretary,
Illinois Agricultural Ass'n.

The occasion of this message was the decline in the price of corn, the decline extending over a period of more than a month. This decline in corn price came at the time of similar declines in the price of hogs and cattle but not in clothing and machinery. Hence the farmers felt that they were getting unfair treatment from somebody. This decline occurred simultaneously with the inauguration of a tremendous national and state campaign against the "High Cost of Living," and of the beginnings of a government suit against the "Big Five" packers, and of widespread labor disorders and strikes.

The effect of these telegrams was to put up the price of corn futures sharply—for the first hour or two of trading—the advance being 8 1/2 cents on September delivery, and about 3 1/2 cents for December and May deliveries. By noon, the flood of buying orders from New York, other cities, and the country trade had spent itself, and the price settled back to about the closing level of the day before. The bulk of corn futures (at this date) fell in the December and May deliveries.

The interpretation put by press reporters on the market significance of this telegram was reflected in their daily market reports. Since they are disinterested parties, their views on this highly important matter are worth quoting:

(From the *Chicago Daily News*, Sept. 17, 1919)

GRAIN VALUES CLOSE NEAR THE LOW POINT

Militant Attitude of Labor Leaders in Regard to Steel Strike a Factor

Corn market showed further strength, with the September leading the upturn. The campaign of the Illinois Agricultural association among farmers advising them to hold their grain as well as the buying by cash interests who were removing hedges on cash corn sold to go east overnight were responsible for the big upward swing in the current month. Reports that the gulf storm had caused loss to the Texas corn crop was a factor in the late months and this together with the strength in the September caused shorts to cover and some investment buying, while selling pressure was light, the upturn in the current month holding bearish sentiment in check and restraining bears from replacing short lines recently covered. Commission houses who were conspicuous buyers around the low point were active sellers on the bulge. New England points accepted all offers of cash corn made to them overnight and sales for shipment reported early totaled 165,000 bu. Country offerings of corn to arrive were just fair and to-day's receipts are estimated at 185 cars. Cash corn premiums were lower; No. 1 yellow sold early at 1½c over September but later 1c premium was the best bid obtainable. Weather is generally favorable for the crop, which is practically made, according to the weekly weather and crop report issued by the weather bureau.

(From the *Chicago Tribune*, September 18, 1919)

STEEL STRIKE THREAT BRINGS GRAIN BREAK

Finish is Well Toward the Low Point; Oat Bulls are Hit

By CHARLES D. MICHAELS

Between the attitude of the farmers, who have been advised to hold their grains, and prospects of serious labor troubles in the steel trade which will indirectly affect other lines of business, the grain traders were kept busy. An early bulge which carried prices up sharply was due to the former, and the break at the close to the latter influence. The finish was well toward the low point, with September corn 4¼c higher and distant futures 1 at $1^7/_8$c lower, December leading, while oats lost $1^5/_8$ at 1¾c, and rye, 1 at 1½c, despite the claims of 500,000 bu. sold for export and removal of hedges here.

Outside markets were irregular. September corn in Kansas City closed $5^3/_8$c higher, while other months were $1^3/_8$ to 1¾c lower. St. Louis lost 1¾ to $1^7/_8$c. Oats in the southwest were $^5/_8$ to $1^7/_8$c lower, and Minneapolis 1¼ to 1½c lower, while Winnipeg gained 1c on October and lost ½ to $^5/_8$c on the deferred futures. Receipts 80 cars.

Corn Bulges, Then Breaks

Heavy and general covering by shorts on the advice given to farmers to hold their grains for higher prices swept values up sharply during the early trading in corn, September jumping 8½c, and the deferred deliveries $3^5/_8$ to 3¾c over the previous day's close, September touching $1.49, or 18½c above the low on Monday.

A break in foreign exchange to a new low level was ignored as local, and commission house shorts scrambled for the free offerings from many of the strong operators and other commission houses who bought on the recent break. Trade was enormous at times, but setbacks were of minor importance until around noon, when

the selling against offers, as well as the general profit taking, checked the demand. Fears of damage to the Texas crop by the recent gulf storm and of an excellent eastern demand for cash grain were factors in inducing short covering.

The market plainly showed the effect of the profit taking when some of the early buyers started to sell. The pit element were caught long and all tried to unload at once, a drop of $5^1/_8$ to 5½c following, with support limited all the way down, the close being at the bottom, with December \$1.21¼ and May \$1.19¾. Cash houses sold September on the bulge and it closed to \$1.44½, showing more strength than the distant deliveries.

Sample values were 7 to 9c higher early, but lost 4 to 5c before the close. Shipping sales aggregated 310,000 bu., including a fair quantity of new. Receipts 161 cars. Country offerings were small.

Continuing this discussion of the farmers' telegram in the *Chicago Tribune* for September 19, the market reporter wrote as follows:

"The attitude of the farmers in holding back their corn and light offerings of cash grains on the whole are influences which, coming after the big break, cause careful operators to go slower on the selling side. Liquidation has been drastic and an increase in the buying power, which some commission houses claimed to have yesterday from the west, induced them to be cautious in advising short sales. Others thought that on any further advance short sales should be made."

"'If the position of the farmer is right in holding his corn he will win out, but if not he will have to take his loss,' said a corn specialist. A country elevator man here yesterday said the holders in many instances will either get more for their corn in the near future, or sell for much less later.

He offered this as an explanation of their attitude." (In Appendix 10 are given cash corn prices for this whole period.)

When it is remembered how large the membership of the Board of Trade is and how many tens of thousands of customers trade through these members, it is obvious how difficult collusion among a large share of these members is for purposes of manipulating the market. It is also apparent that so many widely scattered traders—some near and some far—all watching the markets, are difficult to stampede with market news, reports, rumors, etc. And at the large terminal markets, where continuous market quotations are received, there are always a number of powerful bulls and bears, ready to put on the brake should any sudden bulge or break impend in the Chicago pit.

One proper function of an organized market is to protect that market against manipulations, as well as against corners, as a matter of self-protection. The unorganized market is easier to manipulate than the organized. Organization, high standards of membership, strict rules of commercial conduct, all tend to lessen manipulation.

(g) Increasing Use of Future Trading.—The making of forward contracts is an old business custom in many lines. Short selling, so-called, has come into common use in more recent years.

In the flour and grain trade in the earlier days of our country, merchants often made contracts for future delivery involving a short sale. The following case illustrates this usage in 1836:

Flour—forward contracts—short sales.

The *New York Express* of Monday says, "It will be seen by the report of the market, that flour has advanced considerably up to

the close of Friday's market. What western there was in market Saturday has been sold at \$8.37½ to 8.50. On the 20th western flour sold at \$7.37½—to-day, the same brand at \$8.50. We learn that a house which contracted to deliver about this time 2,000 bbls. at \$7.37½ is now buying at \$8.50 to \$8.62 to complete the contract. No new wheat had been received at the western mills at last advices." *Niles' Register*, Vol. LI, p. 16. Sept. 3, 1836.

One of the greatest users of the future contract is the federal government itself. In buying supplies for the Quartermaster Department of the army, in dealing with labor, and in many other ways, the matter is covered by a definite contract, the contract for one year being a common form.

Apples.—In the fruit industry, particularly apple growing, buyers appear in the orchards early in the summer and sign contracts with the growers for the delivery of the crop. Thus in the spring of 1919, a local firm of Wenatchee (Washington) apple dealers made contracts with orchard owners to take the crop of Jonathans and King Davids at \$2 a box. *The New York Packer* (May 10, 1919) reports the following situation in Oregon:

Portland, Oregon, May 9.—The recent taking of an option on the coming crop of one big apple grower at Hood River even before the trees were fully blossomed, caused considerable interest in the trade. The option was taken as told in the *Packer* at \$1.50 for C grade, \$1.75 for fancy and \$2.00 for extra fancy, but the first report indicated the payment of a liberal sum down. This was later found to be merely \$1.00. Now the parties who first took the option claim they have resold it to a Spokane firm acting for London parties, a profit of \$1,000 being taken before the trees are through blossoming. Later reports indicate that the same English buyers were offering a similar price for additional contracts on Spitzenbergs and Yellow Newtowns and had written several of these. At the

closing of the week business in contracts was impossible because growers were refusing to tie up their expected yields.

Mr. Robert C. Paulus, Manager and Sales Manager of the Salem Fruit Union, Salem, Oregon, addressed the Fourteenth Annual Meeting of the Washington State Horticultural Association, January, 1918, and following his address this discussion took place, on the subject of forward contracts:

Mr. Dean.—"Is it the plan of the company (fruit cannery) to contract for a period of years from the farmers?"

Mr. Paulus.—"They won't go into a community unless they can get five, six, eight or ten year contracts. Any factory that goes into a community on the basis of one year's run either figures on making a big stake of that one year's run, or else within a year or two they will go broke, because conditions will arise which some year will cause them to go without fruit if they haven't it contracted for in advance."

The following quotation is from the *Grain Grower's Guide* of Winnipeg, for October 1, 1919. This paper is the official organ of the Manitoba Grain Growers' Association, the Saskatchewan Grain Growers' Association, and the United Farmers of Alberta. The quotation is as follows:

Apples. Three hundred thousand dollars worth of apples. No, that is not the value of all apples used in Western Canada during a year. It is simply the value of the apples handled by United Grain Growers last year for distribution among western farmers. It shows the western farmer is fond of apples. It shows too, that he has discovered a good system of getting them for himself through his company.

This is how it works. During the year the company watches the fruit market closely, and the progress of the crops in the three districts that supply Western Canada, which are Ontario, Washington, and British Columbia.

During the growing season these districts are visited and discussions held on the ground with the dealers in apples. It may take several visits before the company determines where the best apples are to be had at the lowest price. Finally a contract is made for the estimated number of cars required, shipment to begin as soon as the apples are picked and packed. Sometimes part of a seasons' requirements are purchased in one district and part in another.

California Walnuts.—The California Walnut Growers' Association, in its report of April 30, 1918, describes in the following terms its manner of making forward contracts and of correlating its cost-of-production price to supply-and-demand price.

The selling end of the California Walnut Growers' Association is at present operated as follows: Usually in January the Board of Directors authorizes practically one-half of the Association's estimated output to be sold for delivery during the coming fall on contracts which are non-cancellable. . . . Usually during the month of June the directors of the Association, after having a thorough and careful estimate of the growing crop made, again authorize the sale for fall delivery of whatever surplus of walnuts it is estimated the crop will produce after filling the firm orders taken in January. These offerings are again allotted to the various markets of the country, depending on population, etc., in a way that will insure the widest and most thorough distribution, with the results that by the time the crop is ready for shipment the Association's entire estimated holdings of all grades have been sold for shipment. . . .

The prices of the various grades of walnuts produced by the

California growers must necessarily be based upon the laws of supply and demand. If prices are set so high as to prevent normal consumption a carryover must necessarily result, which always tends to demoralize the market and makes necessary a material price reduction. In order to move an entire crop valued at from five to seven million dollars within a period of two months, and to move it as fast as the goods are packed and ready for shipment and at an absolutely uniform price, it is necessary that that price be a trifle under what is absolutely justified by the laws of supply and demand, for if the wholesale purchaser cannot figure on a slight advance in price as the season wears on he will purchase only his minimum requirements and will not stock up with several months' supply, but will purchase lightly at first, forcing the growers to store such goods as are not necessary for immediate consumption, and the wholesaler will buy later and usually at a lower figure. The method now pursued in determining the proper prices is through advices received from salaried agents that the Association maintains in France and Italy, the principal countries producing walnuts which come into competition with the California line. Advices are constantly received through these agents as to the extent of the foreign crops, the quality, prices being paid, whether the harvest is early or late, etc. The Association's sales department then gathers all possible information regarding the consumer demand in America. Accurate estimates of both domestic and foreign walnuts carried over in this country are secured, the purchasing power of the nation considered, then a careful and accurate estimate of the quantity and quality of the California crop is made, and all of these matters laid before the Board of Directors about the time the shipping campaign opens. The directors first examine and crack samples of walnuts gathered from practically all districts, and determine the average percentage of sound merchantable nuts that can be guaranteed to the purchaser of Diamond Brand goods. They then consider all factors that enter into the value of the product and name prices at which the Association's various grades and brands of walnuts will be offered the trade. And for reasons above stated, these prices

must be slightly below the figure justified by the actual supply and demand as long as the policy of selling at one uniform price throughout the entire season is deemed advisable.

California Prunes and Apricots.—The California Prune and Apricot Growers, Incorporated, have a practice somewhat similar to that of the Walnut Growers. An "Offering Price" is fixed early in the summer, and on this basis forward contracts entered into for future deliveries.

The Industries, Steel, Furniture, etc.—The public is already familiar with the practice of many of the large industrial corporations keeping their plants running "on orders." The steel industry is one example of this, the bulk of their work being the execution of orders in the nature of forward contracts. The practice of the furniture trade in this matter is very strikingly set forth by an advertisement published in the *New York Tribune* of July 23, 1919, by Wanamaker's, relative to the annual August furniture sale of that store:

Copy of Advertisement

Grand Rapids, as most people know, is the furniture center of the United States.

Twice a year 350 of the leading furniture manufacturers of the country, in addition to about 40 local makers, exhibit their samples there and take orders for six months ahead.

This year the Summer exposition-and-sale was scheduled to begin June 23 and continue for one month.

It closed practically within a week. As a matter of fact most of the factories were oversold the first day. More than 2,200 retail buyers attended the sale. The highest number in former years was about 1,700. . . . On all exhibits this card was prominently displayed.

"All orders accepted at current prices not shipped November 1 will be shipped at the prices prevailing at time of shipment. Orders unfilled November 1 are subject to cancellation at buyer's option."

Pure Food Products.—In the manufacture of preserved foods, canned food products, and the various forms of pickles, jams, jellies, etc., it is customary for the manufacturer to make future contracts to safeguard the source of his supply. A conspicuous example of this is the H. J. Heinz Company of Pittsburgh, with its "57 varieties" of pure food products. It is the practice of this company to contract with growers for certain products in advance, such as cucumber pickles, cabbage, tomatoes and cauliflower. The Company's fifty years' experience has demonstrated the necessity of arranging in advance for a definite source of supply to meet its business requirements.

Butter and Eggs.—The Chicago Mercantile Exchange adopted a new set of rules during the year 1919, and on December 1 trading in futures was introduced here in the butter and egg trade.

Beans.—The bean business of Manchuria and Corea has reached a magnitude comparable with the grain trade in America. It is now a custom for the Japanese buyers—the principal buyers there—to make forward contracts with interior dealers. American importers in turn make forward contracts with exporters in the Orient. In the *Bean Bag* magazine for December, 1919, occurs a full page advertisement of one such American dealer in New York City, stating, "We are now booking business to arrive."

Large Bakeries.—Companies which manufacture baking products generally contract well in advance for their supply of flour. The writer recently made inquiry of several of the

largest baking firms of the country concerning their custom in this matter. Some typical replies are quoted.

Statements by Large Bakers

Maine.—"We have no set practice for purchasing our requirements, but as a rule we would usually purchase in the latter part of August or the first part of September enough flour to last us well into the spring, depending entirely upon conditions. If we made such a purchase of flour to last us say from the first part of September until the first part of April it would be bought on the condition of delivery as wanted. We calculate usually to have deliveries made so that we would have at least thirty days' supply of flour on hand. We have also purchased flour that would last us even longer than the first part of April but that was unusual, as we considered by the first of April the Government crop reports for the coming year would usually have more or less effect on the price of flour."

Pennsylvania.—"We use approximately 2,000 barrels of flour monthly, and divide this among two or three mills in quantity to carry us over several months, and by this method we believe we get a slightly better price on our flour. Our observation is that this is the plan of buying by the bakers."

Alabama.—"I understand that it is the practice with some of the larger bakers throughout the country to hedge on the wheat market, personally I have never done this, but have contracted for flour at a stated price, covering a long period, sometimes as long as one year, this arrangement has generally proven satisfactory.

"During the last four or five years, in fact since the be-

ginning of the War, millers have sold for not over 60 day shipments. Of course during a great part of that time the Food Administration did not permit them to do so, nor did it permit the baker to carry more than a 30 days' supply on hand.

"A long time contract, if entered into between parties who show the proper spirit in fulfilling such a contract is generally a very good arrangement, in that it permits the miller to run his mill steadily, and permits the baker to figure his cost basis, a certain price for his flour."

Indiana.—"In normal times it is the custom of the average or large baker to contract their flour several months in advance and some of the bakers have contracted their flour for an entire crop year. Of course this has not been permissible during war period; if this custom was generally carried on I would think it would enable the miller to sell his flour at a very narrow margin."

Grain Futures off the Exchanges.—Future contracts for grain are becoming increasingly common outside the grain exchanges. One illustration of this is the practice by many farmers' coöperative elevator companies of using a written contract with their patrons, calling for the delivery of grain.

Another illustration may be given from the region about Waco, Texas. In this vicinity, where the best red rust proof oats are grown, it is the custom of the dealers to contract with the farmers for the delivery of these oats of No. 3 grade or better, these contracts being entered into before the oats are planted, sometimes, and certainly before they are harvested. The dealers then in turn contract to deliver these oats to buyers in the East, where these oats are largely used for seed as well as for general consumption purposes. In

ordinary years there is no difficulty in following out these contracts.*

Use of Futures to give Certainty and Stability.—The foregoing discussion, citing as it does but a few common uses of futures, illustrates the widespread practice among business men of introducing into their business as many factors of certainty and stability as possible, and, conversely, of eliminating from their business as many risks and uncertainties as possible. The future contract is one way of doing this. But the future contract does not eliminate the risk, it only shifts it. Judging by past experience, it seems very probable that the use of future contracts will increase rather then decrease, irrespective of any action the grain exchanges may take.

(h) **Hedging, Insurance, and Speculation.**—The economic importance of insurance—of shifting or distributing the risk—is sometimes overlooked. Formerly there was but one kind of insurance, namely, property insurance. Then appeared life insurance, and it became one of the greatest protective and financial institutions of modern times. The idea of insurance has grown so much during the last fifty years that its ramifications are extended almost beyond belief. Selecting at random only a few of the commoner forms of insurance in vogue to-day, and we have a list like this: fire insurance, life insurance, accident insurance, sickness insurance, health insurance, marine insurance, lumber insurance, traveler's insurance, church insurance, plate glass insurance, landlord insurance, druggist insurance, physician insurance, credit insurance, rents insurance, profits insurance, use and occupancy insurance, elevator insurance, grain elevator insurance, compensation insurance, fidelity

* *Price Current Grain Reporter*, July 23, 1919, p. 7.

insurance, liability insurance, automobile insurance, collision insurance, agricultural insurance, horse insurance, hog insurance, livestock insurance, hail insurance, cyclone insurance, windstorm insurance, sprinkler leakage insurance, exports and imports insurance, parcels post insurance, household furniture insurance, merchandise in transit insurance, baggage insurance, dog bite insurance, arsony insurance, burglary insurance, theft insurance, robbery insurance, riot insurance, fly wheel insurance, explosion insurance, boiler insurance, strike insurance, civil commotion insurance, bombardment insurance, floater insurance and team insurance.

It is not surprising that in the grain trade there should be developed that form of insurance technically known as hedging. The baker hedges by contracting for flour. The flour mill hedges by offsetting its flour sale contract with a wheat purchase contract in the pit.

Those not familiar with the grain trade are prone to look lightly upon hedging as a mere disembodied theory, and having no place in the daily handling of cash wheat or coarse grains. To persons of this kidney, if any such there be, it is necessary to submit concrete evidence.

Turn to the great wheat region of our North. The largest coöperative association of farmers in the grain business in that section of the United States is known as the Equity. This association operates country elevators and a terminal elevator, its chief function being to receive and sell consignments of grain. This Association has issued certain textbooks for its partons, known as "Grain Growers' Text Book No. 1" and "Grain Growers' Text Book No. 2." The following extended quotation is from book No. 2, mentioned above, and the reader is asked to bear in mind, when reading the

quotation, that the word "option" is wrongly used to designate "future."

Hedging.—From *Equity Grain Growers' Text Book* No. 2, pages 26–27.

Wheat, Durum, Flax, Rye and Oats can be sold to arrive on grades. Barley cannot, as a rule, be sold to arrive on grade, but sample must first be sent in and sales can be made on barley on samples, to arrive; but usually the buyers will pay a little more for barley when the car has arrived at the terminal than they will offer on sample. On straight sales to arrive, shippers have 20 days in which to deliver the grain. You can sell in "broken lots" to arrive, any number of bushels, say 500, 600, 700, 750 bushels or more; while hedges can be sold only in even thousand bushel lots, as will be explained later; but in wiring sales, always spell out the number of bushels instead of using figures, to guard against errors in transmission.

Watch the Market Circulars, and C. N. D's and see if sales to arrive bring the same price as for grain "on track" at the terminals, and if it does, selling to arrive is the simplest way of protecting purchases at country elevators. But if you see that Wheat or Flax "on track" is quoted considerably higher than "to arrive," then you cannot afford to sell to arrive, but should hedge by selling an option as will be explained in the following:

By "Hedging"

is meant that you will sell an option either September, October, November, December or May, according to the time of the year. Wheat, Durum, Flax and Oats Hedges can be sold in even thousand bushel lots of 1,000 bushels and up. Rye and Barley cannot be hedged, but must be sold to arrive. For instance, if you have bought at your elevator 700, 800, or 1,000 bushels of wheat you wire us to sell a thousand bushels December of May Wheat. When you ship that wheat you write on the advice slip an instruction to sell the actual wheat when it arrives at the terminal and at the same

time buy in again the 1,000 bushel hedge you sold for protection. The principle of this hedging system is, that, if the wheat goes down in price while you have it in the elevator or in transit, the option also goes down with it, so that you can buy it back again so much cheaper and thus make on the hedge what you may lose on the actual wheat, and vice versa. If the wheat advances while you have it in the house or in transit, the actual wheat will sell so much higher, but you will lose about the same amount on the hedge, by having to buy it in at so much higher than it was sold for, so you cannot make anything by the actual hedging; it simply protects you from losses and keeps you even and protects your margin of profit. For that reason, this hedging is not speculation at all, simply a legitimate business proposition. On the other hand, if you don't sell to arrive or hedge your bought grain, then you are speculating on it, and that is dangerous, because no one knows what the market is going to be in the future.

You must have at least ½ cent per bushel more for "on track" grain over the "to arrive" to pay for commission on hedges, revenue stamps, etc. Hedges can only be sold upon receipt of Bill of Lading or receipt of check for 10 cents per bushel to protect us; *i. e.*, 1,000 bushels of option would require check for $100, to accompany.

In the matter of sales to arrive, we can accept such sales only from grain dealers, of record. We cannot accept to arrive sales from individuals unless 10 cents per bushel margin accompanies the order or upon receipt of Bill of Lading showing that grain has been loaded. In case grain goes down we will only carry hedges to the point where your margin ceases or as close to this as possible. The way to be safe is to have plenty of margin money up. All balances on margins will be returned as soon as trade is closed. We can carry any kind of legitimate hedge but we do not accept any trade for speculation.

Stored Grain Protected

As long as you have the stored grain in the house or in transit (*i. e.*, grain not bought by the house), it will make no difference to

the shipper whether prices go up or down, as far as the stored grain is concerned. The stored grain should, therefore, not be sold or hedged until it is disposed of at the terminals, but if you use this hedging system and sell as fast as you buy, whether you buy it from the wagon or buy up storage tickets, wire in and sell hedges for all you have bought every day—especially during the busy season, and as fast as you buy close to 1,000 bushels during the slack season,—and if you order us to buy in as near as possible hedges to offset the number of bushels in every car, then your stored grain will always be protected, even if you ship it in and sell it.

Stored grain should never be shipped out when it is possible to hold it. Sometimes, however, it is necessary in order to make room and for other causes. When stored grain is kept in the elevator you take no chances but when the grain is shipped out and the option spreads away from the cash grain then you can readily see that you are the loser. It is impossible to hold all stored grain in the house in most cases, but every bushel possible should be held to protect your storage tickets. Then again, it is illegal in North Dakota to ship out stored grain in excess of the amount of your bond. Remember that we can handle any hedge at any time or on any market, but we do not handle speculative trades.

This quotation is given at length because it sets forth two cardinal principles in the successful operation of country grain elevators in the Northwest, namely, that hedging should be used as an insurance against loss, and that the manager of the country elevator ought not to speculate in grain. He holds a position of trust, and the temptation to speculate with other people's money or other people's grain is a peculiarly strong one. A few fall before this temptation.

The largest wheat market in the world is now Winnipeg. And the largest coöperative organization among farmers on the North American Continent is the organization of the wheat growers in the region between Winnipeg and the

Canadian Rockies. In the May, 1917, crisis in the wheat market, when future trading was temporarily suspended at Winnipeg, and hedging operations were in consequence out of the question, the farmers' country elevators met the situation by the safe but drastic method of simply stopping all buying. These heroic measures met the war-time emergency. Since these events have an importance of the first magnitude in the history of the grain trade, a full and complete account is here reprinted from the official paper of the Canadian grain growers.*

WHY WE STOPPED BUYING AT OUR ELEVATORS

Although the recent crisis in the Western Canadian grain trade has been well reported in the newspapers, it is reasonable to presume that few, outside of the grain trade itself, fully understand the circumstances that culminated in such an unprecedented happening as the general stoppage of country elevator business.

Buying and Selling Wheat

To explain the matter it is first necessary to outline the methods used by country elevator companies in buying and selling wheat. The country elevator companies obtain large loans from banks to finance the buying of grain, and the banks insist on country elevator companies protecting their purchases against market fluctuations by hedging, or, in other words, making sales for future delivery. The banks are not unreasonable in making this provision, and the elevator companies also do not wish to speculate, so the common practice is for elevator companies to sell each day, on the Winnipeg market, an amount of futures equal to their total daily purchases of all grades of wheat. When the wheat so hedged arrives at the Lake terminals, it is sold and an equivalent amount of the future bought back in one transaction. On the other hand, exporters or

* *The Saskatchewan Co-operative Elevator News*, June, 1917, pp. 7–9.

millers wishing to assure themselves necessary supplies of wheat at certain future dates, buy futures for the delivery they require, and eventually exchange them with the elevator and commission companies for the actual wheat. Thus, when the wheat belonging to an elevator company arrives at Lake terminals, the elevator company sells and the miller or exporter buys the wheat, also the elevator company buys, and the miller or exporter sells the future which each has respectively sold or bought. This exchanging of the cash wheat and future forms one transaction; the wheat passing on to the consumer and the future being automatically eliminated.

While the buyers have generally been willing to exchange the future contracts for wheat of almost any grade it should be noted here that the present rules and regulations of the Winnipeg Grain Exchange provide that only 1, 2 and 3 Northern wheat are deliverable on future contracts at certain spreads, so that elevator companies hedging all grades of wheat by selling futures, incur a possible risk of being unable at times to get back from the buyer of their lower grades an equivalent amount of the future which they have previously sold. In such case the spot wheat of low grade would have to be sold flat and the future bought back in the open market, with the consequent possibility of having to bid up the future out of price relation to the sale price of the lower grade. This and the constant fluctuation of spreads, or differences in value, between the lower grades, constitute the weak points of the practice of hedging all grades by selling futures. As an illustration of these two features a table is appended of the spreads of each grade of wheat under the current future delivery value on certain dates.

The constant changings of spreads, especially on the lower grades, is very noticeable and Feed Wheat almost throughout the season has been sold on flat bids.

Buying Stops

Turning now to the real theme of this article, it is well known that in the fall of 1916 the British Royal Wheat Commission, by appointing a buying agent on the Winnipeg market, practically

eliminated all export companies; and this agent, buying for the allied governments, together with the few Canadian milling companies then became almost the sole buyers of wheat on the Winnipeg market. The Royal Wheat Commission made extensive purchases throughout the winter, and spring found them with tremendous holdings of May and July delivery contracts, which according to the rules of the Winnipeg Grain Exchange called for 1, 2 or 3 Northern wheat only. It was, however, presumed that the Royal Wheat Commission would accept any grades of milling value, even if lower than 3 Northern, so elevator companies anticipating no trouble in disposing of lower than contract grades continued the usual practice of selling futures as a hedge against their purchases of lower grades than 3 Northern. The Royal Wheat Commission, of course, preferred the higher grades which would yield most flour for the bulk, as ocean tonnage was scarce and space a great consideration; hence, the Royal Wheat Commission were somewhat reluctant to accept lower grades. Consequently, abnormally wide spreads prevailed this season, especially on Five and Six wheat. Feed wheat they would not accept at all, which explains why it has been at a flat price since last November. As the 1916 crop was of low average grade, approximately 50 per cent of the Royal Wheat Commission's holdings of May and July delivery contracts would have to be filled with lower grades than 3 Northern, and any refusal by the Royal Wheat Commission to accept such lower grades would precipitate a most serious situation. This is just what happened.

On May 2, 1917, the Winnipeg agent of the Royal Wheat Commission refused to accept any grades except 1, 2 and 3 Northern, and tough 1 and 2 Northern on May contracts; on lower grades a flat bid, very much out of relation to the May delivery value, was offered. Elevator companies were thus forced to sell lower grades flat and buy back their hedge (the future delivery contract) in the open market. Panicky buying in of contracts followed and the wildest of wild markets on that memorable day showed a 33½ cent range of fluctuation. On May 3rd May delivery touched $3.05 with a fluctuation of 29½ cents. Briefly, the Royal Wheat Com-

mission had cornered the market, but not for profit as is usual with corners. Their purchases were for actual consumption and would not be resold.

To prevent further panic, and the undue inflation of values, the Council of the Winnipeg Grain Exchange prohibited further trading in May and July deliver contracts. This deprived the elevator companies, even if they had wished to continue buying, of any means of hedging country purchases, and also of a basis for arriving at spreads on the lower grades. Our company deemed it advisable to stop buying until matters were adjusted. We do not speculate and consequently refuse to have anything to do with any form of speculation. To buy wheat at our elevators during a time when we had no means of making hedging sales would have meant speculating with whatever we purchased, so we stopped buying.

Buying Resumes

After a few days of inactivity an arrangement was arrived at between the Royal Wheat Commission, the Canadian millers and the elevator companies, whereby the May and July delivery contracts would be liquidated and business for the balance of the season taken care of by substituting Basis 1 Northern Contracts on which all grades of wheat down to and including No. 5 would be deliverable. Buying was at once resumed in the country. The following spreads were agreed upon to cover deliveries on May and July delivery contracts, and the new Basis 1 Northern Contracts:

	Straight	*Dried*	*Tough*	*Rej. a/c Seeds*	*Rej. a/c Smut*
1 Northern.	Basis	−9	−10	−15	−15
2 Northern.	−3	−9	−12	−18	−18
3 Northern.	−8	−9	−20	−23	−23
No. 4.	−20	−21	−40		
Special No. 4.	−20	−21	−40		
No. 5.	−45	−46			
Special No. 5.	−45	−46			

Note.—Tough grades are not deliverable after May 15, 1917.

We hold no brief for the Winnipeg Grain Exchange, but, before concluding, a word of praise must be extended to the President and Council and the special committee who brought the various interests together. The aims of the association called "The Winnipeg Grain Exchange" as set forth in its constitution are in part as follows:

"To organize, establish and maintain an association not for pecuniary profit or gain, but for the purpose of promoting objects and measures for the advancement of trade and commerce respecting the grain, produce and provision trades for the general benefit of the Dominion of Canada as herein provided."

"To inspire confidence and stability in the methods and workings and integrity of its members."

The members of the Winnipeg Grain Exchange responsible for the above satisfactory settlement of difficulties, which presented so serious an aspect, have certainly acted in accordance with the high sentiment as expressed in the terms of the constitution.

In this situation as outlined in Canada, the local elevator had two alternatives: (1) stop buying; (2) buy at a wide enough margin to feel reasonably well protected. A similar situation existed for a few days on the American side of the boundary line, and in the crisis, some farmers' elevators bought wheat on a margin of fifty cents a bushel in order to be protected against market changes.*

The speculative nature of the hay trade was described as follows in the Nineteenth Annual Report of the President of the National Hay Association at the Kansas City Meeting of the Association in 1912:—

"The very nature of hay, its large bulk when loose in farmers' barns or baled and held in shippers' or dealers' storage sheds, keeps it from being bought and sold as grain and other farm products are on the Chicago Board of Trade and the other commercial exchanges of like character throughout the country. Hence every man that handles hay from the producer to the consumer speculates largely and takes great

* Speculation and the Hay Crop. No Hedging.

chances as there is no way in which he can hedge his trades. For this reason the fluctuations of the market are large and often a few days will show a variation of values from 25 per cent to 50 per cent. No farm product grown in this country is as hazardous to deal in as hay." —President P. E. Goodrich, p. 42.

In theory and in practice, hedging enables the country elevator to do business on a smaller margin, just as the flour miller, by contracting his flour output ahead and also his wheat requirements on the future market, is hedged thereby, and can safely work on a very close margin. A conspicuous example of a well-managed farmers' elevator was that of the Coöperative Farmers' Elevator Company of Hartford, South Dakota, under the late Mr. Iver S. Henjum, well and favorably known to the grain trade. The directors of this company issued from year to year a notice covering the buying margins on grain. While this margin was set at 1 cent a bushel on wheat and oats, it was 3 cents on barley, the barley not being subject to hedging by future trading.

With the increased use of hedging in recent years, coupled with other factors, has come a narrowing of the margins on which country grain is handled. Thus Mr. Pillsbury, the Minneapolis miller, testified before the Committee on Agriculture of the House of Representatives that he formerly bought cheaper of the farmers and sold dearer to the consumers.*

The validity of hedging as insurance may be accepted as an established fact. The real point in controversy now is, how wide a future market is needed in order to provide ample hedging facilities? By a wide market is meant a market with enough traders participating on each side so that mil-

* Testimony before Committee on Agriculture, House, 52d Congress, 1st Sess., p. 193.

lions of bushels of grain can be bought or sold, at any moment, without bulling or bearing the market. This is exactly the condition which differentiates the Chicago futures market from the futures markets of St. Louis, Kansas City, Minneapolis or Winnipeg. An order to buy a million bushels of grain in the Kansas City pit would raise prices there sharply. The same order would have little immediate effect on the Chicago pit. Hence large future orders arriving at these secondary markets are first placed in the Chicago pit, and then gradually worked back into the secondary market, a fraction at a time.

The difference between a wide and a narrow market is very convincingly illustrated by the Winnipeg market when future trading was resumed there in July, 1919. The following quotation describing it, is from the *Commercial West* (Minneapolis), July 26, 1919, page 49.

WHEAT TRADING ON THE WINNIPEG GRAIN EXCHANGE

Winnipeg—After suspension for two years, wheat trading was resumed on the grain exchange here July 21. The first bid was \$2.10 for October, with no offers, and the first sale was made at \$2.20, the price rising to \$2.25 asked, with no buyers. But 5,000 bushels of October were dealt in in the first hour of trading. The first bid for December was \$2.23, with no sales.

Dealers are inclined to be cautious, but are inclined to think the market is going higher, and are waiting for the government to announce the minimum figure, which it is expected will be between \$1.75 and \$2. The millers are not in the market, but are watching the situation closely.

Here is a market without speculators. And it is a narrow market—so narrow that it could offer no hedging facilities.

It is the universal and unanimous opinion among all handlers of cash grain, with whom the writer has conferred on the subject, that the speculator is needed to make a wide market, and the wide market is needed for hedging, and hedging is needed for keeping the costs of handling down. And keeping the costs of handling down is desired by society.

There is another intensely practical aspect of the matter. The commission house through whom the speculator (if a non-member) must trade has no means of knowing whether the trade be a hedge or a speculation.

Thus a Kansas City firm received an order from Texas to buy two hundred thousand bushels of September oats. The order was placed (first in Chicago, then in Kansas City), the house thinking it was a speculative trade. But the trade stood till September, and the cash oats were delivered. An Iowa farmer sometime in September decides that his corn crop is made; that the December price in Chicago is high enough to suit him; and that anyway prices are sure to trend downward. To take advantage of the machinery provided by the Chicago Board of Trade for situations like this, he sells 10,000 bushels of December corn in the Chicago pit. Now he can wait till December and deliver and collect the price. Or, he may change his mind before December and decide to feed hogs and market his corn in the form of hogs. He buys back his December future, or what amounts to the same thing, settles with the house for the balance due him between his bought and his sold price. The house does not know what is in the mind of the trader: and if it did the trader may change his mind. Thus it is that hedging is inextricably interwoven with speculation.

The theory is sometimes advanced that speculation in grain should be limited to men in the grain trade. This

would not work out well in practice, for there is a large class of grain men—in fact the most numerous class of grain men—namely, managers of country elevators who ought not to be allowed to speculate in grain at all. They are supposed to use hedging to avoid speculation. It is interesting to note, that in the North where country elevator managers are financed by terminal commission merchants, they are required to hedge and do hedge, whereas in the Middle and South, they are financed locally and are not required to hedge and many do not hedge. They have, accordingly, larger speculative losses and larger speculative gains—and also do business on a larger margin. However, there seems to be an increase in selling to arrive, which is one form of hedging. The to arrive buyer at the terminal hedges in the pit, and thus indirectly the country shipper is hedged in the pit.

(i) **Summary of Benefits of Organized Speculation.**—Assuming the right of a free American citizen, with money and brains enough, exercising that "pursuit of happiness" which is one of the three "inalienable rights" with which his Creator endowed him (according to that noble and immortal document known as the Declaration of Independence), assuming, I say, the right of such a citizen to buy and sell freely on an open market, then a citizen has a right to speculate, so long as he is not injuring society thereby. Leaving on one side for later discussion the evils of speculation, we may very briefly summarize the recognized benefits of speculation conducted on the organized exchanges under the rules of fair play there in force.

Stabilize prices.—Prices are stabilized near the supply and demand level. Wider swings of the market are greatly lessened in range. In place of the wide swings, there are

many minor fluctuations reflecting very sensitively the pressure of changing supply and demand.

Registers prices.—Speculation does not fix prices, but registers prices. The speculator—who names prices—is working under the laws of supply and demand—or he ceases to be a speculator and is eliminated from the market. The law of the survival of the fittest obtains in the pit.

Wide, continuous market.—Speculation furnishes a wide and a continuous market. There are not always on hand consumptive buyers ready to take the grain at the full market price—although they doubtless would at a discount. Here is where the speculator steps in, and makes the market.

Assumption of Risk.—The distribution of risk, as we may term the assumption of risk, is a factor of first importance on the organized exchanges. That large class of persons who do not want to bear the risk of price fluctuations, and ought not to do so, can, on the future market, shift the risk to that class who prefer to bear the risk. It is well to bear in mind the wider swings of the market when considering the significance of this service. Over any series of years, due to lack of coördination between production and normal consumptive demands, there occur at times a certain marked downward movements of price, or certain long-continued upward movements of price. These big downward swings would wreck the large flour millers, the manufacturers, the big bakers and others with forward contracts, were it not possible to shift risks of this kind to the traders on the future market. Losses in such cases are passed down, step by step, to the traders who are in and out of the market. It may be compared to passing a load down the stairs, one step at a time, instead of throwing it down with one big crash. The whole commercial world benefits by having business stabi-

lized and kept relatively free from sudden and violent charges.

Enemy of Monopoly.—The pit is one market which is open to an unlimited number of traders any hour of any day, by the simple process of forwarding their orders to their brokers. There is little room for doubt that should the organized grain exchanges be abolished (and particularly future trading) the grain trade would very rapidly be centralized in the hand of a few powerful houses. They alone would be the buyers. They would declare the margins on which the farmers' grain would be handled, as indeed they once did before the Exchanges were able to curb them. The big dealers in the trade themselves confess that such a centralization of the grain trade would occur, should future trading be abolished. But the speculators in the future market, numbered by the tens of thousands, and living all the way from New York to San Francisco, from Winnipeg to the Gulf, and in foreign lands, are too widely scattered and too independent to be controlled—so long as the market remains free and open to them. In fact these many "small men" curb the few "big ones."

The highly competitive nature of the business conducted on the trading floor of the organized grain exchange is apparent to any one who will spend a few days or weeks in attendance at this market. The foregoing pages of this book should have made this fact perfectly obvious as it applies to the Chicago Board of Trade. It is not necessary to repeat at this point the facts concerning the number and occupations of the members of the Board of Trade, their scattered places of residence, the number of non-members trading daily through these members, the competition among large terminal markets, and the rise of numerous strong interior

markets. The trading on the floor of an organized exchange is, in letter and in spirit, a great auction, open to the whole world, where buyers and sellers in nearly equal numbers, make their bids and offers. This situation is best appreciated only by contrasting the grain trade with other important trades, such as oil, lumber, sugar, steel, tobacco, etc., in none of which is there an organized exchange. It is a matter of common knowledge, for instance, that when oil exchanges flourished, during the 70's, there was competition in the petroleum industry. With the passing of these exchanges there arose the domination of the oil trade by one centralized group. The one great preventative of monopoly in the grain trade is the organized exchange, with its rules of self-government actually made by the majority of small traders.

Stability of Values.—The favorite banking paper in the Northwest is known as "grain paper," representing grain in warehouses, and hedged in the pit. It is this speculation which renders hedging cheap and easy which also gives, thereby, stability to values and safety to all investments connected with grain.

(j) "Prohibit Speculation": Germany's Experience.—There is always in evidence a strong undercurrent of feeling that speculation should be "prohibited," and should in some manner be entirely "eliminated." There is a somewhat more conservative viewpoint, also in evidence, that speculation should be checked and in some manner lessened in amount. Some would have this checking done by and through the organized exchanges themselves. Others, of course, say, "Let the government do it." There is one government which, prior to the World War, was pointed out as the great model of efficient administration of its laws.

This government was Germany. Whatever criticism was leveled against its principles, policies, and programs, the administration of those laws was always conceded to be a very model of scientific and expert efficiency. Now this country, Germany, undertook to prohibit speculation in farm products. We have every reason to believe that the law was administered with Prussian efficiency. Yet this law did not eliminate speculation. Neither did it help the Farmers' Party (Agrarians), who had it passed on the grounds that "speculation depresses prices." The effect of this law on speculation and on prices is best told by absolutely disinterested witnesses. To give the reader the benefit of such testimony, there is reprinted here in full the official reports of our consuls in Germany at that time, just as these reports were made to our own government. The German law was passed in 1896, and is discussed as follows:

GERMAN LAW AGAINST EXCHANGE SPECULATION

U. S. Consular Reports, Vol. LII, No. 194, Nov., 1896

Germany, under the pressure of the Agrarian party, has undertaken what other nations have been desirous of doing, viz., to check speculation on the exchanges, not alone in stocks, but also in food products, principally grain. Whether this will be accomplished by the new law, remains to be seen, and it will certainly be very interesting for other nations to watch the experiment. Below are given the most salient features of the law:

1. No exchange can be established without the consent of the Government, which, through a commissioner, will exercise a continued supervision over its actions and dealings.

2. A court of honor is created, which may exclude persons from the exchange after due trial. Parties who have been judicially declared bankrupt will be excluded for at least six months, and permanently, if the bankruptcy was fraudulent.

3. When the listing of stocks or bonds is applied for at the exchange, a committee will make a thorough investigation of all circumstances affecting their security and desirability and will then decide whether they may be admitted. Before this is done, a prospectus must be published, giving all particulars of such securities. Stocks will not be admitted until one year after the entry of the firm name in the commercial register, nor before the publication of the balance sheet for the first business year. All parties who have signed the prospectus are legally liable for the correctness of the statements in the same, and must make good any loss or damage to the takers of such securities resulting from false, misleading or omitted statements, in the prospectus. Besides, they are liable to be criminally prosecuted if the circumstances warrant such proceedings.

4. All dealings in futures or on term at the exchange are prohibited, unless the parties to the transaction are entered in the so-called exchange register. The original entry in this register costs 150 marks ($35.70) and an annual fee of 25 marks ($5.95) is exacted to keep the entry alive. The register is public and can be inspected by any person. The entries are at once published in the *Imperial Gazette* (*Reichsanzeiger*) and the local official papers, at the expense of the parties, and a compilation of all names will be published once a year in the *Imperial Gazette.* Persons omitting to have their names entered in the exchange register have no legal claims against each other by reason of any term transactions. Such claims are considered in the light of gambling debts.

5. The term business or dealing in futures in grain and mill products or stocks of mining and manufacturing establishments on the exchange is entirely forbidden.

6. Whoever habitually and for selfish purposes induces inexperienced persons to speculate on the exchange in such articles as are outside of their sphere of business will be punished with imprisonment and a money fine not exceeding 15,000 marks ($3,570).

7. With the exception of the paragraph referring to the exchange

register, which will become operative on November 1, 1896, this law will go into effect on January 1, 1897.

As seen from the above, the main purpose of the law is to check speculative dealings on term, and, as far as this relates to stocks, its influence will probably be beneficial. As to term dealings in merchandise and forbidding term sales of grain and mill products, this remedy may prove to be of doubtful value. The produce exchange was created for want of an institution, the primary and main object of which was to facilitate the handling of agricultural products after the harvests and to distribute them over the entire year as the necessity arose. It is true that, with its development, such evils as "corners," dealing on margins, and other forms of speculation have also crept in, often much to the disadvantage of farmers and consumers. From a moral point of view, the effort to check gambling and illegitimate dealings on the exchange is very laudable, but how will this work in reality? In future, when the farmer, after the harvest, shall offer his crops to the dealer, the latter must be very cautious in naming a price, because he has no facilities of covering himself by term sales. The new law will not prohibit a dealer from buying "long" grain from a farmer or another dealer, if the bargains are consummated privately at the farm or the offices of the dealers, but will not allow that the terms of such bargains be publicly recorded. Thus the dealers really have no scale of prices except for "spot" grain, which fact prevents them from buying freely, and therefore necessarily exercises a depressing influence upon prices, especially after the harvest, when the pressure and necessity to sell are greatest.

It becomes, at a glance, apparent what a terrible blow this law is to the produce exchanges, and nobody can foretell what will hereafter become of them. The dealers are very much alarmed, lest it may threaten the very existence of these time-honored establishments, and, what is worse for them, may wipe out Germany's influence and importance in the international markets and induce German capital to remove to foreign countries. Although the Agrarians expect many advantages, especially a rise in the price of

grain, from this law, they have so far been disappointed, because, since the law was passed, the prices have moved in the other direction, no doubt greatly influenced by the lack of enterprise occasioned by the damaging influences expected by its operation.

The export of grain from the United States to Germany will also suffer, because the German dealer can not now buy great quantities at a time, for the reason that he can not cover himself in advance by term sales.

Another interesting feature of the law is the establishment of the exchange register, or gambling register, as it is commonly called. The term business in grain and mill products on the exchange is forbidden by the law, as I have mentioned before, but the term business in stocks or other farm products is allowed, provided the parties to the transaction enter their names in the exchange register. As the latter is on public record, secret gambling on the exchange by private individuals is thereby done away with, because a private party can not afford to have his name publicly exposed in the gambling register, and a dealer can not venture to do business with a party against whom he could not press a claim. Even a deposit will not protect him, because he can not touch it, having no legal claim against the speculator. This feature of the law really appears to be a good one, because it will prevent private individuals from speculating in things of which they know nothing, a speculation which has seldom brought wealth, but often ruin and shame to a man and his family. The dealers naturally dislike this very much, because it robs them of the opportunity of continuing to shear the lambs. They say that, without speculation, it will be very difficult to dispose of such enormous crops, as, for instance, the sugar crop, and that the keeping away of private speculators can not but have a depressing effect upon prices. This is no doubt true to some extent; but, on the other hand, the moral advantage of keeping innocent outsiders away from the demoralizing influences of exchange gambling in a thing worth trying, and if this feature of the law succeeds it will indeed be a blessing. But human ingenuity will probably also find a way to get around this stipulation of the law, and I should

not be surprised to see the German lambs go speculating in London or Paris or Vienna hereafter, carrying not alone the commission, but also their wool to foreign countries, instead of letting their German countrymen do the clipping, as heretofore.

The establishment of the exchange register will necessarily diminish transactions at all German exchanges, thus curtailing their importance and influence on the world's markets in general. It will no doubt also tend to drive considerable money and business to foreign countries, much to the detriment of German commerce.

The general opinion is that the law, in its present form, will not stand, but must be modified in many ways before its effects will be less detrimental to commerce in general than corrective of the evils which it is intended to remedy.

Magdeburg, August 31, 1896.

(Signed) Julius Muth, Consul.

WORKING OF GERMAN LAW ON EXCHANGE SPECULATION

U. S. Consular Reports, Vol. LXII, No. 235, April, 1900

In compliance with a request from a San Francisco editor, an instruction was sent by the Department to Consul General Mason, December 13, 1899, asking for information in regard to the working of the law to prohibit speculation in grain on 'change in Germany. The reply, dated January 6, 1900 (copy of which has been sent the correspondent) reads:

The statute in question was translated and fully described by Consul Julius Muth, of Magdeburg, in a report dated August 31, 1896, which was published in Consular Reports, No. 194, November, 1896, page 447. Its effects have been exactly what was intended, to prevent grain speculation in chambers of commerce and produce exchanges; but it is stated that such transactions are still carried on to some extent privately, the negotiations taking place in counting rooms, restaurants, and on the street. As there is no public or other definite record of these transactions, it is impossible

to give any approximate estimate of their number or amount; but commercial men and journals generally agree that the law, while favoring to some extent the interests of the agrarians or agriculturists, has operated badly for Germany by throwing discredit upon what is elsewhere recognized as a legitimate form of trade, and thereby driving out of the country to Antwerp, London, and Amsterdam dealings which would otherwise take place at Bremen, Hamburg, Berlin, Frankfort, Mannheim, and other German cities.

WORKING OF THE GERMAN LAW AGAINST SPECULATION IN GRAIN

U. S. Consular Reports, Vol. LXIV, No. 243, December, 1900

In response to the request of the Department for a more detailed report of the practical effects of the German law restricting speculation in stocks and forbidding operations in grain futures, I have to report as follows:

The statute in question was enacted in 1896, and, with the exception of one paragraph relating to exchange registers, went into effect on the 1st of November in that year. Its effective provisions relating to speculation in grain are contained in paragraphs 3 and 4, the first of which prescribes that:

"All dealings in futures or on term at the exchange are prohibited unless all parties to the transaction are entered in the so-called exchange register. Persons omitting to have their names entered on the exchange register have no legal claims against each other by reason of any transactions on term. Such claims are considered gambling debts."

Paragraph 5 declares that:

"The term business, or dealing in futures in grain and mill products or stocks of mining and manufacturing establishments on the exchange, is entirely forbidden."

The law as it was enacted was inspired by the Agrarian party in Germany, which includes most landowners and representatives of agricultural interests, and its avowed purpose was to steady the

market values of securities and especially cereals, which, as the Agrarians claimed, were unduly depressed and disturbed by speculations in which grains were bought and sold on exchange for future delivery. The law is a drastic and radical piece of class legislation, and its enforcement during the past three and a half years has constituted an experiment which has naturally been watched with interest by the economists of other countries. As to its effects, opinions differ in accordance with the interests and preconceived ideas of the person consulted. The Agrarians claim that while it has not increased the market values of home-grown cereals in the German markets to the extent that was expected, it has at least rendered them more steady and uniform; that it has given Germany an autonomous home market, dominated by their own grades and qualities of grain and controlled by German conditions of supply and demand, independent of the markets at Odessa, Antwerp, Liverpool, or Chicago; and, finally, that it has stimulated and elevated the morals of trade—the sale or purchase, on paper, of produce not actually in sight being considered, from the Agrarian standpoint, to be immoral.

On the other hand, the commercial and industrial classes of business men in this part of Germany, including also many of the more intelligent agriculturists, seem convinced that the whole effect of the law has been abortive, and not only of no practical advantage, but a positive injury to the interests of German agriculture.

It is of course impossible to harmonize opinions so radically diverse as these, and it only remains for the impartial student of this subject, who seeks to get at the truth—whatever it may prove or disprove—to follow the register of grain imports, prices, and other facts of record during the past three years and see what bearing they have upon the point of dispute.

It was hoped by the farmers and advocates of the law that its effect would be to restrict the importation of foreign grain, but statistics show that grain imports—which are governed here, as elsewhere, by the relation between consumption and local supply—

have increased rather than diminished. The population of the Fatherland is rapidly increasing; all classes of working people here have been more prosperous during recent years than ever before, and the consumption of wheat and the better grade of rye bread has become more general. The harvests of Germany have not been able to meet this growing demand, and consequently imports of both these cereals have increased, as might have been readily foreseen.

The claim of the Agrarians that the effect of the law has been to render steady and uniform the prices of cereals is not confirmed by the record of expert opinion, so far as the latter can be obtained. For instance, during the summer and autumn season of 1897–1898, the natural influence of a good harvest reduced prices and the German farmers, being all at sea as to the harvests of other countries and therefore at the mercy of a few well-informed speculators, hastily sold a large part of their crops (estimated at 3,400,000 tons) at low rates for export to France, England and Austria. When, later in the season, the general wheat market rose nearly $25 per ton above the summer rate, the deficit created by this excessive export had to be filled by importation from the United States and Russia. Commercial experts writing on the teachings of that episode assert that the prohibition of legitimate speculative operations in grain kept the price in Germany for a long time from $6 to $10 below where it would have been otherwise, and thus facilitated the excessive exports which afterwards had to be replaced and made up for at such heavy cost to the people. As it failed to sustain the prices of home-grown cereals during the season of plenteous harvest, so also the law failed to restrict in any way the actual importations of foreign-grown grains when the needs of public consumption required them. In proof of these conclusions, it is only necessary to follow the course of the market during that period and trace each successive fluctuation to its obvious and recognized cause.

In the year 1897, when the statute first went into effect, wheat cost in Berlin about 180 marks ($42.84) and rye 130 marks ($30.94) per metric ton. In June of the same year, these grains stood at

150 marks ($35.70) (sold) and 115 marks ($27.37) respectively, or about the lowest price that has been reached. From then on the prices began to rise continuously, with small setbacks, until the 9th of May, 1898, when wheat reached 270 marks ($64.26) and rye 185 marks ($44.03) per ton. There was therefore a fluctuation in the course of this year of 120 marks in the price of wheat and 70 marks in that of rye. From the 10th of May, the prices began to fall so rapidly and suddenly that in the first half of August of the same year wheat stood at about 150 marks ($35.70) and rye at about 127 marks ($30.22) per ton; that is, a decline in three and a half months of 120 marks ($28.56) per ton in wheat and of 60 marks ($14.28) in rye. Since then, the prices for wheat have fluctuated between 140 marks ($33.32) and 170 marks ($40.46) and rye between 135 marks ($32.13) and 155 marks ($36.89) per ton.

The reasons for these large fluctuations without sale by commission were as follows:

The partial failure of crops in Hungary and France and light harvests in Russia caused a rise in the world's market for wheat and rye, which was further sustained by reductions of grain duties in France, Spain, and Italy, by the operations of Mr. Leiter, at Chicago, and especially by the gathering clouds of the Spanish-American war. As a direct normal result of these causes, prices were high during the winter of 1897–1898 and only yielded when the favorable spring weather and fine outlook for large crops of both spring and winter wheat broke the market and brought prices down to their natural level. Corn and oats passed through similar fluctuations, showing that only the elementary forces of nature really control the grain market. The German statute against speculations was powerless to produce any other result than that of rendering the farmers subject to the whims of local millers and small traders.

The high average price which rye maintained in Germany during 1898 and 1899, which Agrarian economists sometimes ascribe to the influence of the law of 1896, is easily traceable to the other facts: light crops in Russia—the source of Germany's chief foreign supply—the increased consumption of rye bread by the Russian

peasantry, and the consequently greatly diminished supply for export from that country.

Finally, there is the interesting if somewhat less important question, What has been the effect of the law upon the commercial classes, members of produce exchanges, and chambers of commerce in Berlin and the other leading grain marts of Prussia, viz, Stettin, Magdeburg, Halle, Danzig, and Königsberg? Upon this point, the testimony of experts is practically unanimous and conclusive. The market editor of the leading financial journal of Berlin says, in a special report:

"The effects of the law of 1896 upon the legitimate interests of the bourse have been disastrous. One class of business men—commission merchants—has wholly disappeared. Through its important and direct connections with the provinces and foreign countries, Berlin was formerly one of the most influential markets of Europe, but since the law against grain futures went into force, it has dropped to the rank of a small provincial market. For providing Germany with grain during periods of stringency and short home supply, the system of buying and selling on commission is indispensable. It protects the importer from the danger of a heavy decline in prices by enabling him to dispose of his imports at the same time that they are ordered. To some extent, Berlin merchants have speculated during the past three years through agents in Liverpool, New York, and Chicago, and this with the apparent knowledge and tacit approval of the German Government, which realizes that the German grain market is controlled by influences outside of this country and that Germany can not play an independent rôle in relation to the supply and price of breadstuffs."

In view of the importance and technical difficulties of this subject, it has been deemed advisable to obtain for the purposes of this report, from a high and impartial German authority, a formal review of the conditions which led to the enactment of the antigrain Option Law, its effects, so far as they can now be estimated, and what prospect, if any, there is on an early modification or repeal of the statute. For this purpose, application was made to a Berlin

jurist of high standing and ripe experience in the practice of commercial law, who has with great courtesy prepared for this report the following statement:

"The grain traffic in Germany, which forty years ago had a limited scope and importance and which, partly because of the limited demand and partly on account of the restricted development of the railway system, was confined mainly to the interior of the Empire, has since then gradually but solidly increased as Germany became more and more unable to produce the requisite supply of cereals. First from Austria, then from Russia, then from other grain-exporting countries came especially wheat, until finally it became necessary to supply the demand by drawing upon the general wheat market of the world.

"It thus followed that international commercial usages were adopted in Germany and among these dealings in grain futures, which had been found necessary and requisite. This international grain trade developed rapidly in Germany and centered especially in the chambers of commerce at Mannheim and Berlin.

"During the early nineties, an unusually large number of bankruptcies on the stock exchange attracted public opinion in this country much more closely to the general conditions of business on the bourse, and led to an official inquiry into the subject.

"Meanwhile, the Agrarian party in Germany had acquired such strength and influence as to practically control all measures of legislation. A law governing bourse transactions was enacted, and the Agrarian party, with the hope of raising the inland market price of grain, inserted a clause in the bourse statute absolutely prohibiting the sale and purchase of 'futures' in cereals and mill products. At the same time the Prussian Minister of Commerce issued a regulation based on the bourse law, in which he forced the representatives of agriculture into the boards of management of the produce exchanges, and there was chosen for the Berlin bourse the hotspur of the Agrarian party, together with whom the merchants were obliged to decline to work, for the reason that during the recent debates over the bourse law the Agrarian orators had vilified the

merchants with shameless abuse. It was especially in consequence of this regulation, which the commercial and financial classes recognized as a direct slap in the face that the members of the Berlin Produce Exchange declared unanimously (January 2, 1897) that they would no longer remain on the bourse, and they thereupon left it altogether. At the same time, the prosperous grain business of the exchange was completely ruined by the prohibition as to dealing in futures. A number of the principal commercial cities of Prussia, Stettin, Magdeburg, Halle, Danzig, and Königsberg followed the example of Berlin.

"In consequence of the absolute impossibility of dispensing wholly with sales and purchases for future delivery, the grain merchants were forced to conduct their business under a plan by which they made at places other than the bourse the so-called legal specified term orders (handelsrechtliche Lieferungsgeschäft), in so far as they related to produce not actually in hand. These specified time contracts are in fact a method of business authorized by commercial law, in which the buyer, in case of non-delivery of the goods on a specified day, must grant (to the seller) a still further extension of time. Meanwhile, the meetings for these operations were recognized by the officials as 'exchanges' and were ordered to be discontinued. The results, therefore, of the prohibition of transactions in grain futures in Berlin may be synopsized as follows:

"(1) Dealings in futures are necessary and indispensable to dealers, importers, exporters, and millers for the avoidance of mere gambling in grain. Such dealings prevent sudden fluctuations in prices and equalize the prices of cereals from one harvest to another in accordance with the natural conditions of supply and demand. It is a fact of definite record that since the 1st of January, 1897, our inland cereals, in spite of their good quality, have ruled considerably below the market prices of other countries, a condition which was formerly of rare occurrence and merely temporary.

"(2) The legal specified term orders (handelsrechtliche Lieferungsgeschäft) is for a good market like Berlin no adequate substitute for regular dealings in grain futures on a produce exchange.

"(3) With the abolition of dealings in futures it became impossible to establish fixed standard prices, while prices that were made by secret transactions have had none of the authority and fixedness that belonged to open, legitimate operation on the bourse prior to January 1, 1897.

"(4) The creation of stocks of grain here in Berlin has greatly diminished since the prohibition of dealings in futures.

"(5) The legitimate local speculations have been necessarily conducted in foreign markets, where they were subject to high fees and expenses, and to the influence of 'corners' all of which would have been avoided had local dealings in futures been permitted.

"(6) The so-called 'small man' in the grain trade is the one most injured by the suppression of futures—many have been wholly ruined; only a few have been able to maintain a modest and uncertain existence.

"(7) The importation of foreign cereals—which covers only a small percentage of the total consumption—has, contrary to the hopes of Agrarians, not been affected one way or another.

"(8) The stability of the grain market during the past three years has been in no way affected by the prohibition of dealings in futures, but has been solely controlled by natural causes (short crops in Germany and foreign countries).

"Quite recently, there has been a movement looking toward the reorganization of the produce exchange by means of a revision of the bourse regulations by the Prussian Ministry of Commerce, so as to eliminate the affront to the honor of merchants which is implied by the first regulations (January 1, 1897); and since the bourse law forbids transactions in futures, it is proposed to agree with the Government upon the use of final bills of sale (Schlusscheine) which, while they would not reëstablish dealings in futures, would endeavor to provide some sort of substitute for them.

"Under this new régime, based upon the final bills of sale (Schlusscheine) which have been approved by the Prussian Government, the bourse ratification for grains and mill products is again reëstablished.

"On the whole, the Government is thoroughly convinced of the unjustified injury which legitimate commerce has suffered through the prohibition of dealings in grain futures. It knows quite as well as the Agrarians that this prohibition has secured for cereals grown in the interior of Germany no better market and no higher prices. But, in view of the present dominating influence of the Agrarians, whose leaders naturally seek to avoid any confession of their mistakes, the Government is not now in position to secure a repeal of the prohibition."

Such are the verdicts of two men whose positions and experience entitle them to recognition as expert observers of the actual workings of the German antioption law. While their opinions may be to some degree shaped by their interests as members of the commercial class in Berlin, there can be no doubt that they express substantially the sentiment of the whole industrial and mercantile community in this country, which, in matters of fiscal and economic policy, is opposed to Agrarian exclusiveness and conservatism.

(Signed) Frank H. Mason,
Consul-General.

Berlin, August 28, 1900.

These quotations bring the story of Germany's legislation down to 1900.

On April 2, 1900, future trading in grains was reopened. According to the report of the "Eldest of the Merchants" at this time, the only persons benefiting by the Bourse Law of 1896 were the interior dealers who worked on wider margins —paid the farmers less and sold the grain for more. The Bremen Cotton Exchange, whose future trading in cotton was stopped by this same Bourse Act, was later reopened to future trading.

Thus did Germany undergo a change in policy towards future trading.

(k) Speculation a Social Question.—In the foregoing

pages speculation has been discussed as it is related to and forms a part of our organized exchanges. There is, however, but an insignificant part of the world's speculation conducted on produce exchanges. Speculation is as wide as society itself and as old as society. The John Law scheme, the Mississippi Bubble, Holland Tulip, Spanish Jackasses, Western lands, Oil wells, Gold mines, Rubber plantations, "Booms" in western cities, Black Friday and Gold Speculation,—always some speculative activity. There is not only much speculation outside the exchanges, but there is much speculation in grain outside the grain exchanges.

Is it possible to draw the line between "unwise investments" and speculations? Every village can point to at least one empty and idle factory, now failed and out of business, due to "unwise investment" of capital by some one. The sum total of money wasted in this way runs up into many millions. The art of safe and sound investment is an art which likely not more than one man in a hundred possesses. Such a man, directing his own investments and those of others into productive channels is entitled to great financial reward and to great praise.

The writer was once asked to prepare a paper on "Educated Gullibility," the purpose of the paper being to show the "unwise investments" made by two educated classes, college professors and preachers. Fifty persons were interviewed for the purpose. Every one of these persons had lost money through "unwise investments." The term speculation is more correct but less euphonious in this connection. If the educated classes are "economic illiterates" in this field of investing money, it stands to reason that many other persons are.*

* A surprisingly large number of middle-aged farmers have in their

It is not strange that so many men of note, whose history we now know, became entangled, not through "unwise investments" of their own, but through being drawn in by their friends. When Mark Twain's estate was settled, it is said that there was found among his assets a goodly sized pile of "securities" in bogus and fake enterprises. The great financial calamity of his life was his venture, with his friends, in starting a publishing house. A somewhat similar tragedy befell Walter Scott, who was held for the debts of a failed publishing venture. The years of grinding toil which followed this "unwise investment" of his friends, in order to lift the burden of debt, unquestionably shortened the life of Scott. William E. Gladstone's experience with "unwise investments" was somewhat similar to Walter Scott's. This great statesman, while occupied with problems of the British Empire, had to meet out of his personal income heavy debts incurred by others. The story of President U. S. Grant is familiar—how he permitted the use of his name by a company which later failed, and how he felt in honor bound to pay the creditors—and how it took years of time and the sacrifice of his personal belongings to meet these debts.

These "unwise investments," or speculations, as we may frankly call them, have this evil in common, namely, the speculator was speculating with somebody else's money. This is an evil of speculation which is without one redeeming feature.

The foregoing illustrations show that speculation is a bigger question than the mere organized exchanges. It suggests the possibility that an organized exchange

possession an assortment of beautifully printed certificates of stock in defunct corporations, particularly in "coöperative" corporations.

might limit and curtail some of the evil aspects of speculation.

Successful speculation fails to receive the same social condemnation as unsuccessful speculation. Take the subject of land speculation—always the leading form of speculation in America. The richest man in America, at the close of the Revolution, was our revered first President, George Washington. At the time of his death in 1799 his estate was worth nearly one million dollars. The bulk of this fortune, we now know, came from land speculation, particularly in New York, Pennsylvania, and along the Ohio River. While George Washington was a successful farmer, so far as the worn-out Virginia estate would permit success, he was unable to increase his wealth by farming this soil. But his land speculations proved very profitable. The ethics of this speculation is not generally called in question.

Prior to Washington's day all large business ventures were deemed hazardous and were uniformly called "adventures," and the men carrying them out were officially termed "adventurers." Thus the good Pilgrim Fathers who first settled in New England were sent over by a corporation, designated by its charter as a "company of adventurers." In a modern sense, they were speculators, endeavoring to establish "trade, fisheries and plantations" in the New World. This illustrates the better side of the speculative spirit, adventuring into new fields, assuming risks, out of which may come social gains. Without some speculation of this kind, no new continents would have been discovered; no new lands settled; no new cities built; no railroads or mines or steamships put to man's use. All progress is dependent upon a certain degree of speculation, in the wholesome use of the term.

(1) Evils of Speculation.—The ethical aspects of the abuse of speculation, rather than the economic aspects of the use of speculation, are uppermost in the minds of the people. "The people hath spoken." Hence the rather general condemnation of speculation of all kinds, good and bad alike. The employment departments of large corporations generally require the applicant to be vouched for by those competent to speak, and one question on the blank form used is "Does the applicant speculate?" Positions of trust are barred to the man who speculates.

There are two kinds of speculation—good and bad, and there are two kinds of speculators—the fit and the unfit. Speculation by the unfit is bad speculation. Those unfit to speculate are those (1) who lack the financial means to stand losses; (2) those who have not sufficient information, and (3) those who are occupying positions of trust, especially those who are directly entrusted with funds belonging to others. The evils of speculation arise from the speculation by the unfit. The Board of Trade realizes this fact more than the outsider. Members of the Board of Trade are constantly paying the penalty of the abuse of speculation by the unfit. Within recent years, for instance, a house, lax in its methods, accepted speculative trades from the cashier of a large firm on the Board of Trade. This ran on for some time, till the crisis arrived, and the cashier—honest man though he had been for seventeen years—was found to have stolen $60,000 of his employer's money. All firms on the Board with a big list of speculative customers experience losses through "bad debts," that is, through allowing credit to unfit speculators. Some of these losses are very large. Every member of the Board is familiar with cases among his own acquaintances of suicides caused by speculation and losses. The Board is per-

haps more wide awake to the evils of speculation that the ordinary citizen is. And it is to the self-interest of the Board to eliminate, so far as possible, the evils of speculation. The past history of the Board shows that in every case of a clear-cut issue of reform, the majority of the members have supported the reform. The past history also shows that the "black sheep" of the flock have met with punishment—either suspension or expulsion. Some writers and speakers judge the Board of Trade only by the black sheep of the institution. It would be just as unfair a thing to judge our other social institutions in the same way—to measure the medical profession by the quack doctor; the legal profession by the shyster lawyer; the bench by the venal judge; the church by the faithless priest; the family by the divorce court; the State by the graft in politics; the school by the educated failures in life. We do not judge the school, the state, the family, the church, by these standards. We allow for a certain margin of imperfection.

(m) Constructive Reforms.—If we may judge by Germany's experience, an attempt to "eliminate speculation" must fail. Repressive laws do not eradicate it or improve it.

The evolution of our industrial system has been interwoven with speculation. No one can forecast the future. Three things might lessen the amount of speculation in grains. The abolition of the credit system would doubtless eliminate one class of risks, but at what cost no one can say. If farmers would market 1/52 part of their crop each week, it would largely abolish the job of the common pit speculator, the farmer in this case becoming his own speculator. Or, in the third place, the future may bring such a development of collective bargaining that prices will be set in this manner for six months or a year at a time. This would stabilize prices,

and if conducted with due regard to the consumer's interests, would be a large step in lessening speculation in the grain trade. But since grains are world crops, and are sold on world markets, the prices of grain in America would of necessity bear some relation to crop and price conditions in other lands.

The United States Grain Corporation "stabilized" the price of wheat during the war, by buying it at the fixed price of $2.26 a bushel (contract grade). However, finding the demand strong, the government itself became a speculator, selling out the cash wheat at a higher price, and realizing a net profit on the first year's speculation of over $23,000,000. To "stabilize" price without "stabilizing" both production and consumption is impossible for any length of time.

Program of Reform.—Recognizing that there are serious evils connected with the abuse of speculation, we may suggest three measures of reform:

(1) Education.—The whole subject of investing money being one in which most people are "economic illiterates," the first need in this field is a scheme of education that will teach the fundamental principles of this subject. Now that the various Liberty Loans have familiarized some ten or twelve million persons with buying securities, who previously had no first-hand knowledge of bonds or stocks, the time is ripe to interest people in the subject of good and bad investments. The very slender chance the amateur speculator has should be taught, in season and out of season. Several heads of large speculative houses never make a speculative trade themselves! They know the subject too intimately. It is a theory of our government that the individual is not to be coddled and protected too much—as some paternal governments have unsuccessfully tried to do—but that

he is to be educated to stand on his own feet,—with the choice before him of going up or going down. Therefore, if the individual be taught that 90 per cent of the amateur speculators fail (according to tradition), and what is the difference between sound and unsound investments, he has reached the point where he must make his own choice, in Biblical phrase, "between good and evil." A successful program of education would no doubt lessen speculation by the unfit.

(2) **Government.**—The government's supervision over national banks suggests one method of government "regulation" of the grain exchanges. National banks are inspected once a year, and report certain facts as to their condition five times a year. Since the individual member of the Board of Trade is acting as agent for his customers, handling their trades, their grain and their money, his business has ceased to be a purely private one. The fiduciary relationship is paramount. The grain market is a matter of public concern. Surely public policy would justify a certain amount of government inspection. The program the writer has in mind is simply this. Let the federal government at least once a year inspect the books and records of every firm trading in futures for its customers, in order to determine the financial status of that firm, particularly whether or not it is solvent. When a bank is insolvent, it must cease receiving deposits. Yet it is a fact that there have been firms on the Board of Trade which were insolvent, and yet continued to do business for the public, for some time, before the state of their affairs became known. Insolvencies come from two sources—speculation by the firm itself, and "bad debts" of the customers of the firm—customers in many cases who were unfit to speculate. A system of inspection of this kind

would surely make the firm more careful in taking on new customers, and in extending credit to customers. The present credit system makes speculation easier for customers. The spirit of the times demands that speculation be made harder, not easier for the public. A government inspection of the kind outlined would perform a service for the Board of Trade which it is unable to do for itself. The members of the Board, being competitors in business, are not in a position to inspect the books of one another. Hence some independent, disinterested authority must do this, if it is done at all.

Firms which were found to be insolvent should be wound up at once. As to the "bad debts" on the books of solvent members, the writer has no set plan in mind for handling this matter. The government might publish an annual report, lumping together in one item, the total amount of these bad debts, without making public the names of the firms involved.

To carry out a program of this kind, the government would need to employ expert accountants, versed in Board of Trade bookkeeping, and these accountants would devote their entire time to future trading accounts on the four or five exchanges where future trading is conducted.

In addition to one annual inspection, each firm should make, like the banks, five short reports on forms prescribed, which would reveal the condition of solvency or insolvency of the firm.

A reform of this kind would in no way affect the legitimate speculator, the man of means who has a market opinion which he is ready to back up with his money.

It would, in the opinion of the writer, eliminate from the firm's books a great many doubtful and frankly unfit specu-

lators. It would dignify the business, and put it on a little higher plane than it is now.

And last, but not least, the remedy is a very simple one.

(3) **Board of Trade.**—The Board of Trade, in the opinion of the writer has within its power the means of curing most of the evils arising from the abuse of speculation in grain futures. The Board has constantly fought abuses and devised remedies to fit the needs in the past, largely as a matter of self-interest. The Board of Trade is, however, very sensitive to public opinion, and does make rules from time to time which are dictated more by a decent respect to public opinion than by self-interest. It is a notable fact that certain prominent firms on the Board of Trade which once derived their income almost entirely from the trade of speculators now have important cash grain departments. As a definite program of reform, however, the writer would suggest four things: (1) Greater care and scrutiny should be exercised in admitting new members, to the end that those not worthy of the dignified name of grain merchants would be kept out. (2) Stricter rules should be adopted and enforced concerning the taking on of new customers for future trading. The data concerning the customer's occupation and financial standing should be verified before he is put on the books as a customer. No person holding any position of trust whatsoever should be accepted as a customer. (3) A little closer censorship should be kept on the market news letters sent out daily by speculative houses, to the end that no "tips" or temptations to speculate be included in such letters. (4) Wire houses having branch offices in small towns should be doubly cautious about developing trade of a purely speculative nature among the "unfit speculators." The rapid spread of wire house offices

into the country districts of the grain belt is justified only on the grounds that the wire house is offering the country grain trade a "superior service"—a thing, oddly enough, which its competitors accuse it of doing.

It seems to the writer that most of the hope of curing the evils of organized speculation must of necessity be placed in the organized exchange itself. The situation may be compared to city government, with its good and its bad features. It has been truly said that gambling or any other form of vice cannot exist twenty-four hours in the city without the police knowing it. If it continues to exist after that, it is by the sufferance of the police. And similarly, it may be just as truthfully said of the Board of Trade that manipulation of the market, crooked dealings, uncommercial conduct, etc., cannot go on very long without the Directors, sooner or later, knowing about it. And whether the practice be stopped instantly upon discovery or be permitted to continue is wholly within the hands of the Directors. Almost every day some petty squabble or complaint comes to their attention and is settled. It has happened (and not rarely) that some member has fallen into habits that are not up to the commercial code, and such member has been quietly "requested" by a Director to sell out his membership. Such a member always quits, to avoid the scandal of a trial and expulsion, and to save the value of his membership. It sometimes happens, too, that members of great power and prominence are disciplined, and even suspended or expelled. Members who have belonged to the Board of Trade for fifty years or more—and there are several of them in business on the Board yet—testify to the high standard of men generally chosen to the Directorate. It is therefore to this Directorate of eighteen men that we must look in the last analysis, for

such sane and wholesome changes, improvements, and reforms as are needed.

(n) **Summary on Speculation.**—There is a saying that fire and water are good servants but bad masters. To a much milder degree, it may be said that speculation is a good servant but a bad master. It is potent for evil, or it is beneficent, depending on how it is used. It cannot be eliminated. It can be checked. To a certain extent it can be directed into useful channels. By whom shall it be checked and directed? The government can help check it by a system of inspection and publicity. The Board of Trade itself has both the necessary information and power for both checking speculation and directing it into useful channels. Under Board of Trade rules, speculation is organized—conducted according to fixed rules, out in the open, in the full light of day, and each transaction is given its proper weight in influencing prices. Speculation is put to work, helping market and finance the grain crops of the country on a lower margin than would be possible without the help of the speculator.

During the World War the United States Food Administration decided at different times that certain restrictions should be put on grain speculation. The decisions were communicated to the Directors of the Board of Trade. Immediately, in every case, the requested restriction was put into effect. Thus did the Board of Trade demonstrate its ability to check and control speculation in a manner which a war emergency seemed for the moment to justify. It did not seem advisable to the Food Administration at any time to request that speculation be entirely stopped. In other words, it was recognized that speculation is part of the machinery for cheaply handling the grain crop between producer and consumer.

All men speculate.. They may condemn speculation in others, but they themselves speculate in something—in town lots, or Florida lands, or fruit orchards, or farm lands, or oil wells, or gold mines, or in something else. The fact remains that every normal man speculates.

Most forms of speculation are inconsequential and lead nowhither. They are simply dissipated in the economic life of our society.

Organized speculation is power. It is liable to abuse. As Chief Justice Marshall said, all power is liable to abuse. And one colonial governor of Virginia made himself famous for publicly thanking "God that there are no free schools or printing presses in Virginia." His statement continued that schools and printing presses make the people read and know and thus these people might come to have a power which they might turn against their kingly government. And so they did. They used their power wisely. The organized exchanges use the power of organized speculation in conducting the grain markets of the world. The fundamental question is, do they abuse this power or do they use it wisely? In the opinion of the writer, the abuse of this power is local, temporary, and incidental: the wise use of this power is the general, and characteristic practice of the exchanges.

APPENDIX I

World's Wheat Harvest, Total Crop and Amount of Wheat Imported or Exported by Various Countries

Month	*Countries harvesting wheat*	*Av. crop*	*Surplus exported*	*Imported*
Jan.	Australian and New Zealand	140,000,000	50,000,000	
	Chili	20,000,000	3,000,000	
	Argentina—continued.			
Feb.	Upper Egypt	40,000,000	10,000,000	
Mar.	Lower Egypt.			
	India	325,000,000	55,000,000	
Apr.	Syria, Cyprus, Persia, Asia Minor	150,000,000	10,000,000	
	Arabia			
	Mexico	10,000,000		
	Cuba			500,000
May	Algeria and Tunis	40,000,000		
	China			1,000,000
	Japan	28,000,000		3,000,000
June	United States	750,000,000	150,000,000	
	Greece	6,000,000		7,000,000
	Italy	175,000,000		53,000,000
	Spain	150,000,000		4,000,000
	Portugal	8,000,000		3,000,000
	France	300,000,000		40,000,000
	Jugo-Slavia	20,000,000	5,000,000	
July	U. S. and France, continued.			
	Roumania	80,000,000	52,000,000	
	Bulgaria	40,000,000	10,000,000	

July	Austria	40,000,000	1,000,000 (Austria and Hungary)	
	Hungary	200,000,000		
	Serbia	10,000,000		
	Russia and Siberia	850,000,000	150,000,000	
	Germany	150,000,000		70,000,000
	Switzerland	4,000,000		19,000,000
	England (United Kingdom)	60,000,000		220,000,000
	Czecho-Slovaka	10,000,000		
Aug.	U. S. and Russia, continued.			
	Belgium	8,000,000		51,000,000
	Luxemburg	500,000		
	Holland	4,000,000		23,000,000
	Denmark	6,000,000		7,000,000
	Poland	10,000,000		
	Colombia	1,000,000		
Sept.	Canada	200,000,000	100,000,000	
	Sweden	9,000,000		7,000,000
	Norway	350,000		
Oct.	Canada—continued.			
Nov.	Brazil			20,000,000
	Peru	2,000,000		
	South Africa	6,000,000		7,000,000
Dec.	Uruguay	10,000,000	2,000,000	
	Argentina	175,000,000	95,000,000	
	Burmah	200,000		
		4,038,050,000	693,000,000	535,500,000

Note. Persons familiar with the grain trade, particularly the wheat and corn market, always take into consideration the crop of our principal competitors. Conversely, growers in competitive areas such as Argentina, are much interested in the size of the American crop. A good illustration of this fact is found in the Argentina wheat crisis of 1916, following America's bumper crop of a billion bushels in 1915. The story is told in our official consular reports as follows:

Investigation of Grain Markets in Argentina

The Argentine Government recently appointed a commission to make an investigation of grain markets, with a view to protecting the interests of domestic growers and shippers. The report of the commission, as quoted in a recent number of the Revista Financiera y Commercial, showed that the present low price of wheat in Argentina is due chiefly to the extraordinarily large world production of wheat in the 1915–1916 crop year. North America alone is able to supply nearly all the wheat needed in Europe, and the difference in freight does not permit Argentina to compete advantageously in this trade. The present wheat supply in Argentina is estimated at 1,500,000 tons (50,000,000 bu.), which is gradually being marketed. *Daily Commerce Reports*, Sept. 7, 1916, p. 903.

APPENDIX 2

Wheat: Production and Farm Value in the United States

1866–1915

Average farm price per bushel December 1

(Yearbook of the Department of Agriculture, 1915)

Year	*Bushels*	*Price*	*Year*	*Bushels*	*Price*
1866	152,000,000	152.7	1890	399,262,000	83.8
1867	212,441,000	145.2	1891	611,781,000	83.9
1868	224,037,000	108.5	1892	515,947,000	62.4
1869	287,746,000	76.5	1893	396,132,000	53.8
			1894	460,267,000	49.1
1870	235,885,000	94.4	1895	467,103,000	50.9
1871	230,722,000	114.5	1896	427,684,000	72.6
1872	249,997,000	111.4	1897	530,149,000	80.8
1873	281,255,000	106.9	1898	675,149,000	58.2
1874	308,103,000	86.3	1899	658,534,000	58.4
1875	292,136,000	89.5			
1876	289,356,000	97.0	1900	522,320,000	61.9

Year	*Bushels*	*Price*	*Year*	*Bushels*	*Price*
1877	364,194,000	105.7	1901	748,460,000	62.4
1878	420,122,000	77.6	1902	670,063,000	63.0
1879	459,483,000	110.8	1903	637,822,000	69.5
			1904	552,400,000	92.4
1880	498,550,000	95.1	1905	692,979,000	74.8
1881	383,280,000	119.2	1906	735,261,000	66.7
1882	504,185,000	88.4	1907	634,087,000	87.4
1883	421,086,000	91.1	1908	664,602,000	92.8
1884	512,765,000	64.5	1909	683,366,000	98.6
1885	357,112,000	77.1			
1886	457,218,000	68.7	1910	635,121,000	88.3
1887	456,329,000	68.1	1911	621,338,000	87.4
1888	415,868,000	92.6	1912	730,267,000	76.0
1889	468,374,000	69.8	1913	763,380,000	76.9
			1914	891,017,000	98.6
			1915	1,025,801,000	91.9

Note. With the exception of years influenced by financial panics and by wars, the price of wheat in the above table is seen to fall with increase in yield, and to rise with fall in yield. In other words, the basic law of supply and demand is not violated.

APPENDIX 3

Prices on Chicago Board of Trade

Wheat

Price Fluctuations in Relation to Supply and Demand

By Crop Years for Ten Normal Years, 1905–1914

The factors influencing price are supply and demand. "Supply" is measured largely by (1) world crop; (2) United States crop; (3) Visible supply in the United States. "Demand" is supposed to increase in about the same ratio as population increases. However,

serious events such as strikes, riots, panics, food boycotts, embargoes, war, etc., influence the demand side of the market. Price also varies with value of money.

The following figures show how closely the Chicago wheat prices follow the supply and demand factors of the market:

	Av. price No. 2 hard red wheat, Chicago	*U. S. visible supply wheat 000 omitted*	*U. S. wheat crop 000 omitted*	*World wheat crop 000 omitted*	*Bradstreet's Index No. showing price level (value of money)*
	c.	bu.	bu.	bu.	
1905	106	27,413	692,979	2,903,421	8.0987
1906	83	36,627	735,261	3,252,520	8.4176
1907	77	47,365	634,087	3,319,072	8.9045
1908	96	33,125	664,602	2,950,840	8.0094
1909	114	28,896	737,189	3,093,816	8.5153
1910	115	27,182	635,121	3,609,656	8.9881
1911	95	47,800	621,338	3,524,824	8.7132
1912	99	45,057	730,267	3,422,368	9.1867
1913	105	52,781	763,380	3,704,140	9.2076
1914	93	47,057	891,017	3,725,488	8.9034

Per Capita Consumption of Wheat (Broomhall):

	bu.		bu.
Argentina	10.	India	0.9
Australasia	7.2	Italy	6.5
Austria-Hungary	5.0	Norway	1.6
Belgium	8.6	Portugal	1.8
Canada	13.0	Balkans	6.0
Denmark	4.0	Russia	4.0
Egypt	3.5	Spain	6.8
France	9.0	Sweden	2.7
Germany	3.3	Switzerland	6.7
Greece	4.5	United Kingdom	6.0
Holland	4.0	United States	6.4

In the above table it will be noted that the price follows the Visible, decreasing with an increase in Visible, and increasing with a decrease in Visible. This holds true up to the years 1913 and 1914. We have large Visible here, large United States crops, large world crops, and yet high prices for wheat. This price cannot be explained on the *supply* side. We must look to the demand side. And here a factor is clearly in sight. For each of these two years the importing countries of Europe took over 100,000,000 bushels in excess of their average, normal requirements—a demand which stiffened prices. Apparently some countries in Europe were storing up wheat or flour against the opening of the World War which began August 1, 1914.* In Chicago heavy buying for wheat came through Italy, destined presumably for Germany.

* Figures for world's wheat crop are taken from Broomhall's Corn Trade Year Book, Liverpool, 1914. Chicago wheat prices are taken from Annual Reports Chicago Board of Trade. The average price per year is arrived at by adding the highest and lowest cash prices for contract wheat, for each month in the year and dividing the sum by 24. The visible supply is the average of the highest and lowest visible for each year. The index numbers are from Bradstreet's, July 12, 1919, p. 446.

APPENDIX 4

List of flour mills grinding 1,000 barrels of flour annually in the eleven states tributary to Chicago, and amount of wheat ground for one year.

(U. S. Census 1909)

From the Millers' Almanack, 1917–1918, p. 218

State	*No. of mills*	*Wheat ground in 1 year*
Minnesota	248	104,251,138 bu.
Kansas	209	49,607,646 "
Illinois	220	30,137,000 "
Ohio	527	27,142,000 "
Missouri	388	26,753,000 "
Indiana	411	22,825,000 "
Michigan	293	16,621,000 "
Wisconsin	149	16,096,000 "
Nebraska	189	10,712,000 "
Iowa	122	6,933,000 "
South Dakota	72	4,685,000 "

APPENDIX 5

Relation Between Future Price and Cash Price

When the future price is stabilized

(On July 11, 1917, the Board of Directors of the Chicago Board of Trade adopted a resolution prohibiting members from making any future corn contracts for delivery during any month of the year 1918 at a price in excess of $1.28 per bushel. The next day the Directors made this same rule apply to corn for December, 1917, delivery. These rules were not rescinded till April 9, 1918, permitting contracts for delivery on and after June 1, 1918 to be made

at market price. The U. S. Food Administration desired to reduce the price of corn, and to this end asked for a curtailment of "speculation in corn." The result of this action is shown below.)

Corn prices, cash and future, Chicago Board of Trade, 1917–1918

	No. 2 Spot			*No. 2 Dec. delivery*			
Month	*low*		*high*	*low*		*high*	
July	177½	to	2.32	108½	to	124¾	Upset price being 1.28, Dec. and later futures
Aug.	169	"	236	$105^5/_8$	"	$118^7/_8$	
Sept.	195	"	224	111	"	$122^3/_8$	
Oct.	189	"	215½	$111^3/_8$	"	121	
Nov.	185	"	229	114	"	125	
Dec.	160	"	190	$121^7/_8$	"	127¾	
				May delivery			
Jan.	170	to	185	123¼	to	126	
Feb.	170	"	180	124½	"	127¼	
Mar.	165	"	175	$120^7/_8$	"	127½	
Apr.	160	"	165	124½	"	127½	
May	150	"	155	$127^7/_8$	"	$127^7/_8$	(Trading in May Contracts suspended by Directors, May 21.)
				July delivery			
June	150	to	165	130¾	to	148¾	
				Nos. 3, 4, July delivery			
July	160	to	175	146¼	to	164	(Change in grades deliverable on contracts, owing to condition of corn crop.)

The above table should be considered in connection with the one below, showing the price of cash corn for 1917, from January 1, up to the time the maximum price was set on the December futures, namely, July. The market movement was tending upward—and so continued till the new crop arrived.

Corn (Spot) January to July, 1917, Board of Trade, Chicago

	Low *High*
January	93¼–103
February	96¾–102¾
March	102½–122½
April	123 –160
May	152 –174
June	158 –176

APPENDIX 6

Private Wire Houses

Members Chicago Board of Trade, 1919

Name	*Branch Offices*	*Correspondents*
Armour Grain Company	13	7
J. S. Bache & Company	10	1
Bright Sears & Company	1	..
Bartlett Frazier Co.	7	4
Beach Wickham Grain Company	1	5
James E. Bennett & Company	25	13
H. & B. Beer	1	34
N. L. Carpenter & Company	4	15
Childs, Kay & Woods	3	1
Clark, Childs & Company	2	9
John F. Clark & Company	—	20
E. J. Feehery & Company	2	2
Halle & Stiegletz	1	—
Harris Winthrop & Company	3	7
A. A. Housman & Company	—	1
Hughes & Dier	7	—
Hulburd, Warren & Chandler	7	—
E. F. Hutton	6	11
Jackson Brothers Company	2	7
Jenks, Gwynne & Company	1	2
King Farnum & Company	1	1

Name	Branch Offices	Correspondents
Lamson Brothers and Company	20	11
Laidlaw & Company	—	4
Charles E. Lewis & Company	1	—
Arthur Lipper	1	—
Logan & Bryan	23	86
E. Lowitz & Company	9	4
Miller & Company	2	1
S. Mincer	2	—
McDonnell & Company	1	—
Orthwein-Matchette Company	5	—
Otis & Company	5	—
Post & Flagg	—	12
Pynchon & Company	1	—
J. Rosenbaum Grain Company	1	—
E. C. Randolph	5	13
Sawers Grain Company	6	—
Shearson, Hammill Company	6	7
Simons Day & Company	12	9
Shaffer & Stream	5	—
Strandberg, McGreevy & Company	4	—
Thompson & McKinnon	6	38
Trans-Mississippi Grain Company	3	—
Updike Grain Company	—	9
Gardner B. Van Ness Company	11	—
M. L. Vehon Company	1	—
E. W. Wagner & Company	31	20
Ware & Leland	12	13

APPENDIX 7

Wheat Price Fluctuations (1) Before Grain Exchanges were established, and (2) After Grain Exchanges were established. For 100-year period

1

Prices of Wheat at Albany for 60 years, 1793–1852

The following table, showing the price of wheat per bushel at Albany, New York, on the first day of January in each year, from 1793 to 1852, has been prepared from tables kept at the office of the Van Rensselaer Manor at Albany (Hunt's Merchants' Magazine, Vol. XXXI, p. 109):

1793–$0.75	1813–$2.25	1833–$1.25
1794– 1.00	1814– 1.87½	1834– 1.00
1795– 1.37½	1815– 1.62½	1835– 1.00
1796– 2.00	1816– 1.75	1836– 1.50
1797– 1.50	1817– 2.25	1837– 2.25
1798– 1.25	1818– 1.87½	1838– 1.62½
1799– 1.18¾	1819– 1.75	1839– 1.75
1800– 1.56¼	1820– 1.00	1840– 1.12½
1801– 1.81¼	1821– .75	1841– 1.00
1802– 1.00	1822– 1.12½	1842– 1.25
1803– 1.12½	1823– 1.25	1843– 1.87½
1804– 1.25	1824– 1.25	1844– 1.00
1805– 2.00	1825– 1.00	1845– .93¾
1806– 1.43¾	1826– .87½	1846– 1.18¾
1807– 1.37½	1827– 1.00	1847– 1.12½
1808– 1.12½	1828– 1.00	1848– 1.31¼
1809– 1.00	1829– 1.75	1849– 1.18¾
1810– 1.56¼	1830– 1.00	1850– 1.18¾
1811– 1.75	1831– 1.25	1851– 1.12½
1812– 1.87½	1832– 1.25	1852– 1.00

Price ranges, 20 years (1793–1812) .75 –2.00 = 1.25
(1813–1832) .75 –2.25 = 1.50
(1833–1852) .93¾–2.25 = 1.31¼

2

Prices of Wheat, Chicago Board of Trade, 40 years, 1874–1913

The following table, showing the price of No. 2 wheat, Chicago, on the first business day of the year, from 1874 to 1913, has been prepared from the Annual Reports of the Chicago Board of Trade:

1874–$1.17¼	1894–$ .59¾
1875– .90½	1895– .53⅛
1876– .95¾	1896– .57
1877– 1.24¾	1897– .81
1878– 1.07⅞	1898– .90½
1879– .82½	1899– .67¼
1880– 1.32¾	1900– .66¼
1881– .98⅜	1901– .73¾
1882– 1.27	1902– .78¼
1883– .93⅝	1903– .71½
1884– .94½	1904– .82
1885– .78¾	1905– 1.15½
1886– .84⅛	1906– .85
1887– .79½	1907– .71
1888– .77⅝	1908– .91¼
1889– .99⅜	1909– 1.03¼
1890– .77¾	1910– 1.21½
1891– .88¼	1911– .92¼
1892– .88½	1912– .93⅜
1893– .72⅛	1913– 1.07½

Price ranges, 20 years (1874–1893) .72⅛–1.32¾ = 60⅝
(1894–1913) .53⅛–1.21½ = 68⅜

From the above table it is evident that price fluctuations in wheat were twice as large in amount, before future trading was used, as they were after future trading was used.

APPENDIX 8

Grain Storage in Chicago

(1918 Report Chicago Board of Trade)

I. Regular Public Elevators.

Name of warehouse	*Operated by*	*Capacity, bu.*
Armour Elevators A and B	Armour Grain Company	1,500,000
Armour Elevator C	Armour Grain Company	1,000,000
Calumet Elevator B	Central Elevator Co	1,000,000
Chicago & St. Louis & Annex	J. Rosenbaum Grain Co.	2,000,000
J. Rosenbaum Elevator A.	J. Rosenbaum Grain Co.	400,000
J. Rosenbaum Elevator B	J. Rosenbaum Grain Co.	1,550,000
Rock Island Elevator A	J. Rosenbaum Grain Co.	1,250,000
S. Chicago Elevator C & Annex	S. Chicago Elevator Co	3,000,000
Total Public Storage		11,700,000

II. Private Elevators.

Name of warehouse	*Operated by*	*Capacity, bu.*
Central	Armour Grain Company.	1,000,000
Chicago & Northwestern Railway Terminal	Armour Grain Company	6,000,000
Grand Trunk	Armour Grain Company	400,000
Minnesota	Armour Grain Company	750,000
Santa Fe	Armour Grain Company	1,500,000
Union	Armour Grain Company	1,800,000
Calumet A	Central Elevator Co	1,200,000
Calumet C	Central Elevator Co	1,200,000
National	Central Elevator Co	1,000,000
New York Central	Central Elevator Co	1,500,000
Irondale	J. Rosenbaum Grain Co.	1,000,000
J. Rosenbaum C	J. Rosenbaum Grain Co.	250,000
South Chicago D	So. Chicago Elevator Co.	1,500,000
A. Dickinson (35 St.)	A. Dickinson Company	600,000
Acme Malt	Acme Malt Company	200,000

Name of warehouse	*Operated by*	*Capacity, bu.*
American Linseed Company	American Linseed Co	200,000
American Maize	American Maize Products Co	100,000
American Malting Company	American Malting Co	500,000
American Malting Company	American Malting Co	550,000
American Malting Company	American Malting Co	500,000
Atlantic	Arcadia Farms Milling Co	50,000
B. A. Eckart Mill	B. A. Eckhart Milling Co	1,000,000
Badenoch	J. J. Badenoch Company	350,000
Bell	Rosenbaum Brothers	1,500,000
Byrnes	W. J. Byrnes & Company	40,000
Calumet Malting Co	Calumet Malting Co	420,000
Columbia Malting Co	Columbia Malting Co	1,000,000
Concrete	Hales & Edwards Co	1,500,000
Edwards El	Hales & Edwards Co	20,000
Hales	Hales & Edwards Co	1,000,000
Hamilton Elevator and Tanks	Hales & Edwards Co	500,000
Merchants El	Hales & Edwards Co	20,000
Cragin	F. J. Delany	600,000
Fleischman	Fleischman Malting Co	1,000,000
Grand Crossing	F. G. Ely	60,000
Haler & Carden	Brooks Elevator Co	550,000
Harvey	Harvey Grain Company	270,000
Hayford	Frank Marshall	100,000
Hirst & Begley	Hirst & Begley Linseed Co	75,000
Interstate	Quaker Oats Company	775,000
Keystone	E. R. Bacon	1,500,000
Wabash	E. R. Bacon	1,500,000
Keelen Brothers	Keelen Brothers	100,000
Matteson	C. L. Daugherty & Co	100,000
McAvoy's Brewery	McAvoy Brewing Co	100,000
McKenna & Rodgers	McKenna & Rodgers	50,000
Michigan Central	F. H. Mealiff & Son	300,000
Mueller & Young	Mueller & Young Grain Co	1,000,000
Northwestern Yeast	Northwestern Yeast Co	350,000
Norris	Norris & Company	1,000,000
Range & Sons	T. Range & Sons	20,000

Name of warehouse	*Operated by*	*Capacity, bu.*
Rialto	Nye-Jenks Grain Co	1,000,000
Rockwell	W. E. Ellis	80,000
Schwill Malt House	A. Schwill & Company	3,000,000
Seipps Brewery	Seipp Brewing Company	325,000
Standard Brewery	Standard Brewing Co	100,000
Standard	Taylor & Bournique Co	400,000
Star & Crescent	Star & Crescent Milling Co.	500,000
U. S. Brewery	U. S. Brewing Company	100,000
Total Private		45,605,000
Total Public		11,700,000
Total Chicago		57,375,000

APPENDIX 9

Price Fluctuations Due to Unforeseen Causes, at Times

Odd Example, "horse disease" 1872

In October, 1872, it was announced in Chicago that further eastern grain shipments on Erie Canal would likely be embargoed due to the prevalence of a so-called "horse disease." Hundreds of eastern horses were dying daily, according to reports. Very soon the canal traffic was almost suspended. By the 31st of the month the spread of the epidemic had affected the markets and prices of grain and other produce went down. The "horse disease" spread rapidly, the wholesale business of Boston being practically suspended, and New York's business suffering severely. By the first of November the disease had spread to Chicago, and street cars, omnibuses, and coal wagons were stopped. All horses for towing were taken off the Illinois & Michigan Canal. Some ox teams were put on. While the horse disease was raging for a few weeks, the business of the country was almost completely paralyzed.

APPENDIX 10

CORN

Closing Prices of Spot Corn (No. 2 Mixed) Chicago, May 1, 1919, to September 30, 1919

May	1	164 –165	June	2	175 –176	July	1	180 –181
	2	167 –168		3	176 –177		2	183 –184
	3	170½–171		4	175½–176½		3	186 –187
				5	175 –176			
	5	166½–167		6	174 –175		4	189 –189½
	6	170½–171		7	172 –173		8	192 –193
	7	169 –170					9	197 –198
	8	170 –171		9	172 –172½		10	195 –195½
	9	174 –175		10	172 –172½		11	191 –192
	10	174 –175		11	171 –171½		12	194 –195
				12	173 –173½			
	12	181 –182		13	175 –176		14	193 –194
	13	179 –180		14	175 –176		15	192 –193
	14	175 –177					16	193 –194
	15	176 –177		16	178 –178½		17	193 –194
	16	176 –177		17	177 –177½		18	190 –191
	17	175 –176		18	181 –182		19	190½–191½
				19	181½–182½			
	19	176 –176½		20	183½–184½		21	193½–194
	20	177 –178		21	182 –183		22	195 –196
	21	181 –183					23	195 –197
	22	182 –183		23	182 –183		24	196 –197
	23	181 –182		24	180 –181		25	197 –198
	24	179 –180		25	180 –181		26	196 –197
				26	179½–180½			
	26	178 –179		27	178½–179½		28	198 –200
	27	180½–181½		28	176½–177½		29	199 –200
	28	181 –182					30	200 –201
	29	175 –176		30	177½–178½		31	200 –201
	31	174 –176						

August	1	197–198
	2	196–198
	4	190–192
	5	182–184
	6	190–192
	7	194–196
	8	198–200
	9	201–203
	11	202–204
	12	202–204
	13	203–205
	14	200–202
	15	198–199
	16	198–199
	18	193–195
	19	195–196
	20	196–198
	21	197–198
	22	197–198
	23	194–196
	25	193–194
	26	193–194
	27	192–193
	28	187–188
	29	184–185
	30	183

September	1	Labor Day
	2	177 –179
	3	173 –174
	4	165½–166
	5	166 –166½
	6	167 –167½
	8	166 –166½
	9	163 –164
	10	163½–164½
	11	156 –156½
	12	146 –147
	13	129½–140
	15	136 –137
	16	140½–141½
	17	145 –146
	18	147 –148
	19	148 –149
	20	
	22	149 –149½
	23	154 –156
	24	155 –156
	25	149 –150
	26	143 –144
	27	142 –143
	29	141½–142½
	30	

APPENDIX 11

Market News Restrictions

Board of Trade of the City of Chicago,
Secretary's Office.

Bulletin No. 49
(1919)

Chicago, March 15, 1919.

To Members:

Your attention is called to the following notice sent out by the Directory in 1910; and the Executive Officers ask that you comply with same without fail:

> Members of the Board publishing circular market letters are requested to send one of such letters, in each case, to the Secretary of the Board.

The Directory on February 23, 1915, instructed the Secretary to notify all members of the Board that, in disseminating news that would tend to influence the market, other than that of a statistical nature, they must be sure of their information and the reliability of its source, and be prepared at all times to supply the Secretary with their authority for it. This is again called to your attention.

All rumors are prohibited: only facts should be stated.

(Signed) John R. Mauff, Secretary.

APPENDIX 12

Regulations of Crop Reporting Methods

Board of Trade of the City of Chicago,
Secretary's Office.

Bulletin, R—1
(1919)

Chicago, April 16, 1919.

To Members of the Clearing House:

The following action was reaffirmed by the Directory at its regular meeting held on April 15, 1919:

Hereafter crop reports shall be given publicity only when compiled by accredited crop experts; further, that those wishing to qualify as such experts shall register their names in the Secretary's Office and be duly approved.

After such registration and approval, crop reporters will be permitted to compile the results of their investigations and make public, information relative to crop conditions, when the reports are sufficiently comprehensive to indicate the general situation.

Circulation in any manner whatsoever by members of this Association of crop reports from other sources that are not official will be a violation of the action of this Directory and will be considered a grave offense against the good name of the Association.

Please give this all the publicity possible, so that it may be understood by every one connected with the trade.

(Signed) John R. Mauff, Secretary.

APPENDIX 13

Regulation of Future Trading

Board of Trade of the City of Chicago,
Secretary's Office.

Bulletin No. 45
(1918)

Chicago, December 26, 1918.

To Members:

At a special meeting of the Board of Directors held this day, a telegram from Mr. J. J. Stream, Chief, Coarse Grains Division, U. S. Food Administration, was read:

New York, December 24, 1918.

John R. Mauff, Secretary,
Board of Trade, Chicago.

Grain Exchanges are advised that on and after January 1, 1919, they may, in their discretion, remove all quantity restrictions on trading in future deliveries of Corn, Oats, Rye and Barley. This relaxation does not abrogate or modify any of the provisions of the Food Control Act, and Grain Exchanges and their members will continue to be held strictly accountable for any manipulative practices resulting in undue depression or enhancement of grain prices.

(Signed) J. J. Stream,
Chief Coarse Grains, Food Administration.

Be it therefore Resolved, that on and after January 1, 1919, all quantity restrictions or trading in future deliveries of corn, oats, rye and barley be rescinded, and a copy of this action be forwarded to Mr. Stream.

Be it also resolved, that the Secretary notify all members of this action and call their special attention to the last three lines in the telegram from Mr. Stream to the effect that members will continue

to be held strictly accountable for any manipulative practices resulting in undue depression or enhancement of grain prices. This will indicate the policy of the Officers of this Exchange in the future handling of this matter.

(Signed) JOHN R. MAUFF, Secretary.

APPENDIX 14

Restrictions on Future Trading

Board of Trade of the City of Chicago,
Secretary's Office.

Bulletin No. 51
(1919)

Chicago, May 19, 1919.

To Members:

Whereas, under authority delegated to the United States Food Administration by President Wilson, Mr. Julius H. Barnes, Chief of the Cereal Division, has suggested that the Board of Directors of this Association reinstate the ruling limiting the amount of open trades in corn for any one interest or individual to 200,000 bushels; and further,

That in the case of any accounts now open beyond that quantity, the officers make proper effort to secure a reduction to that basis in the near future, and further:

That cognizance must be taken of the fact that restrictions against *hoarding*, Section 6 of the Food Control Law, is in full force and effect until the existing state of war between the United States and Germany shall have terminated, the fact and date to be ascertained and proclaimed by the President of the United States; and,

Whereas, the Board of Directors of the Board of Trade consider the above suggestion from Mr. Julius H. Barnes as equivalent to an order from the United States Food Administration, therefore,

Be it Resolved, that no individual, firm, or corporation, except for

hedging purposes, have or control any contracts either for purchase or for sale, calling for corn for future delivery in excess of 200,000 bushels; further,

Resolved, that contracts for deferred acceptance, whether daily or weekly, and spreading between different months of delivery, and contracts open during a session as well as between sessions, are all included in these restrictions; further,

Resolved, that contracts entered into as a hedge shall be unlimited in amount, but not incommensurate with actual requirements; and in determining the nature of a hedging contract, the direct manufactured products of corn, may be included, and hedging in connection with the feeding of live-stock is permissible without license and free of restrictions; further,

Resolved, that contracts now open in excess of 200,000 bushels must show progress towards adjustment from time to time and a full compliance therewith on or before the close of the market session June 7, 1919; further,

Resolved, that any evasion of these resolutions by trading in the name of a third party, or joint account, or opening or keeping an account not properly designated by the legal name and address of the person, firm or corporation actually represented thereby is prohibited; further,

Resolved, that any violation of the loyal and patriotic intent of these resolutions or failure to comply with the written demands of the Executive Officers acting in accordance therewith, shall be considered a grave offense against the good name and dignity of this Association, and punished by suspension or expulsion, under the provisions of Section 18 of Rule IV of the rules of the Board.

By order of the Executive Officers.

(Signed) John R. Mauff, Secretary.

APPENDIX 15

Executing Trades in the Open Market

Board of Trade of the City of Chicago,
Secretary's Office.

Bulletin No. 6
(1919)

Chicago, July 24, 1919.

To Members:

The Secretary was instructed by the Board of Directors to put before our membership, by illustration, various acts that would constitute a violation of the rule on principal and agent (section 11, of Rule IV), reading as follows:

Sec. 11. No member of this Association is allowed under any circumstances to be both principal and agent in any transaction in any of the commodities dealt in under the rules of this Board. Furthermore, no member of this Association in any transaction in any of the commodities dealt in under the rules of this Board shall allow himself directly or indirectly, either by his own act or by the act of an employe or of a broker or other member of this Association, to be placed in the position of agent for both buyer and seller.

The Board of Directors has approved of the following in that connection:

When a customer entrusts his order to a member of this Association for execution, whether such member, in his capacity as agent, is an individual, firm or corporation, the customer is entitled under the rules of this Association to an execution in the open market and in a manner in which the agent can have no personal interest, either directly or indirectly, in whole or in part.

Therefore, a violation of section eleven of Rule IV would occur, should a member of this Association, whether an individual, firm or corporation, while acting as agent, take for his personal account, or for the account of his firm or a member thereof, or his corporation or

an officer thereof, the other side of a contract on an order entrusted to him for execution, whether directly or indirectly, in whole or in part. The penalty for this is expulsion. This would occur whether the act was accomplished through an employe, broker, partner of a firm or officer of a corporation. This applies with equal force to brokerage firms not members of the Clearing House, and a member of any such firm trading with his partner, directly or indirectly, where one side of the contract was for his personal account, such firm would be placed in position of "principal and agent."

The Board of Directors also instructed the Secretary to call attention of the members to Section 8 of Rule IV, reading as follows:

"All orders received by any member of this Association, firm or corporation doing business upon the Board of Trade of the City of Chicago, to buy or sell for future delivery any of the articles or commodities dealt in upon the floor of the Exchange (except when in exchange for cash property) *must* be executed *in the open market* in the Exchange Hall during the hours of regular trading, and under no circumstances shall any member, firm or corporation assume to have executed any of such orders or any portion thereof by taking the trades, or any portion of any of them, for their own account, either directly or indirectly, in their own name or that of an employe, broker or other member of this Association. Any member convicted of violation of this rule by the Board of Directors shall be expelled.

(Signed) JOHN R. MAUFF, Secretary.

APPENDIX 16

The following story illustrates how a small piece of paper "money" ("credit money," that is, a "promise to pay money") does the work of real money (gold).

"Mr. Brown, a Kansas gentleman, is the proprietor of a boarding house. Around his table at a recent dinner sat his wife, Mrs. Brown; the village milliner, Mrs. Andrews; Mr. Black, the baker; Mr. Jor-

dan, a carpenter; and Mr. Hadley, a flour, feed and lumber merchant. Mr. Brown took a ten-dollar bill from his pocket and handed it to Mrs. Brown, with the remark that there was ten dollars towards the twenty he had promised her. Mrs. Brown handed the bill to Mrs. Andrews, the milliner, saying, "that pays for my new bonnet." Mrs. Andrews, in turn, passed it on to Mr. Jordan, remarking that it would pay for the carpentry work he had done for her. Mr. Jordan handed it to Mr. Hadley, requesting his receipted bill for flour, feed, and lumber. Mr. Hadley gave the bill back to Mr. Brown, saying, "that pays ten dollars on my board." Mr. Brown again passed it to Mrs. Brown, remarking that he had now paid her the twenty dollars he had promised her. She in turn, paid it to Mr. Black, to settle her bread and pastry account, Mr. Black handed it to Mr. Hadley, asking credit for the amount of his flour bill, Mr. Hadley again returning it to Mr. Brown with the remark, that it settled for his month's board; whereupon Brown put it back into his pocket, observing that he had not supposed a greenback would go so far."

A greenback is not money. It is a promise to pay money. The greenback may be presented to the United States Treasury and exchanged for real money—gold.

The above story is quoted from *Among the Humorists and After-dinner Speakers*, Collier & Sons, New York, 1909, p. 251.

APPENDIX 17

Prices of Wheat to Producers in Kansas, etc.

(63d Congress, 3d Session. House Document 1271)

The following quotation is the summary of findings of this report. This investigation of the grain trade was made by the Federal government pursuant to House Resolution 571 calling for a report by the Department of Agriculture concerning the prices paid for wheat to the producer in the State of Kansas, and the prices at which said wheat was sold for export at Kansas City, and how such

prices were fixed and determined. This important report shows that the "consumer's dollar," in the case of Kansas wheat, went largely to the farmer.

Summarized statement showing the spread between the price received by a farmer in southern Kansas on Sept. 28, 1914, and the price received by an exporter for wheat to be delivered at Liverpool, together with the various elements of marketing costs.

	Cents per bushel
Price received by farmer in Kansas	87.0
Margin taken by country elevator	3.0
Price paid country elevator by shipper	90.0
Freight rate point in Kansas to Galveston	15.0
Inspection and weighing at Galveston	.25
Gross profit of shipper	1.25
Price paid by exporter at Galveston	106.50
Cost of elevation, loading into boat, etc.	1.25
Freight, Galveston to Liverpool	6.0
Insurance, etc., in transit	.75
Overhead expenses of exporter	1.0
Net profit of exporter	1.25
Price delivered at Liverpool	116.75

Summarized statement of approximate spread between Kansas farm price and price delivered at Philadelphia on Kansas City terms, Sept. 30, 1914.

	Cents per bushel
Price received by farmer in Kansas	87.0
Margin taken by country elevator	3.0
Freight rate to Kansas City	6.2
Inspection, weighing, and interest on draft	.25
Commission	1.0
Price paid by shipper in Kansas City	97.45

Freight rate, Kansas City to Philadelphia	15.6
Mixing in Kansas City elevator	.25
Exchange	.20
Overhead expense of shipper	.375
Net profit of shipper	.625
Price delivered in Philadelphia	114.500

SUMMARY

1. The State of Kansas is fortunately situated for marketing its wheat in that it has a great number of domestic outlets and the foreign market via Gulf ports. This situation leads to vigorous competition between grain dealers of the various terminal markets for Kansas wheat.

2. The prices of wheat paid to farmers in Kansas are based largely upon the prices in Kansas City, Mo., and at the Gulf ports for export. From these basic prices must be subtracted the freight rate, shipper's profit, and other incidental charges and the margin taken out by the country elevator to determine the price which is paid to the farmer. Since the margins of profit taken by the grain dealers in the larger markets are very small (averaging about 1 cent a bushel), it appears that the farmers of Kansas, as a general rule, are obtaining all their wheat is worth.

3. The weakest link in the chain of marketing Kansas wheat is the country elevator. Compared with the value and difficulty of service rendered, the margin taken by the country elevator is perhaps larger than that taken by any other middleman in the marketing of wheat. One special weakness is in the failure to use the future market to hedge holdings. Elevators frequently become congested with unhedged stored grain. The elevators, as a general rule, are operated inefficiently, with inadequate accounting systems and lack a sufficient working capital.

4. In conspicuous contrast with the country elevator situation is the great efficiency and highly organized method of operation of the

terminal grain operators and the exporters. In the case of the export trade especially the profits per bushel are extremely low considering the service rendered and the capital and risk involved.

5. No evidence was discovered of collusion between large interests to restrain competition or to depress prices in Kansas City. In Kansas City 86 per cent of the terminal-elevator capacity is controlled by six firms, but these firms appear to be in competition with each other.

6. The cost of transportation is by far the largest element in the cost of marketing wheat. Of the total difference between the farm price and the Kansas City price, freight accounts for approximately 65 per cent. Of the spread between the farm price and the Liverpool price, railroad and ocean freights account for approximately 70 per cent.

APPENDIX 18

Mixing

The Mixing Problem as Applied to Butter

The mixing of grain to bring it to the level of the official grade has an interesting parallel in the mixing of water with butter to bring the butter to the level of the federal standard.

Under our federal law (Act of May 9, 1902) any butter in the manufacture or manipulation of which any process or material is used with intent or effect of causing the absorption of abnormal quantities of moisture is adulterated butter.

The normal moisture content of butter (*i. e.*, the amount of water in the butter) was apparently set at 16 per cent by a regulation of the Commissioner of Internal Revenue (Regulation No. 9, United States Internal Revenue, p. 87).

Hence farmers' coöperative creameries and other creameries making butter containing only 12 or 13 per cent of water were able to comply with the federal standard after adding three or four per

cent of water to their butter. And with butter selling at fifty cents a pound, it was of course profitable to sell all the water possible at fifty cents a pound.

Dairy scientists, experts in State Agricultural Colleges, State Department of Agriculture and others, soon began to explain and commend ways of "controlling" the moisture content of butter—in other words, mixing water with butter. For instance, the following may be mentioned as calling the attention of butter makers to the moisture content problem. Professor C. L. Peck in his book, *Profitable Dairying* (1906–11), p. 114; Professor Charles A. Publow, *Questions and Answers on Butter Making* (1916), pp. 30, 34, 37, 38, 44; Professor Henry Stewart, *The Dairyman's Manual* (1911); Larsen and White, *Dairy Technology* (1914); Professor Martin H. Meyer, *Butter Making and Dairy Arithmetic* (1915, 4th edition). On pages 116–117, and 132–133 of this book, Professor Meyer discusses these topics: Controlling moisture in butter; Methods and processes by which the amount of water in butter may be increased and retained; How not to exceed the legal moisture limit. Professor John Michels, *Creamery Butter Making* (1915, 8th edition), on pages 127 and 154, shows how the moisture content of butter has been increased during the past few years, and advises those butter makers who desire to be on the safe side to make 15 per cent their limit, and avoid "falling into the clutches of the law." Professor Wm. A. Stocking, *Manual of Milk Products* (1917), pp. 256–257, shows that by modifying the methods of manufacture butter makers can increase the water in their butter "2 or 3 per cent," which "means a large difference in the money returns to the creamery." Professor G. L. McKay, "Some Facts About Moisture and Its Effect on Butter" (*Hoard's Dairyman*, Vol. 37, p. 432, May 25, 1906), declared that if the maker of butter could incorporate 14 or even 15 per cent of water and make a uniform high grade of butter, it was to his own and his patron's interest to do so. The State Dairy Commissioner of Iowa in his 19th annual report (1905) spoke commendingly of the dairy work done at the State's Agricultural College at Ames. This language was used:

"The Dairy Department at Ames by a series of experiments and investigations showed that not only could a skillful butter maker make his overrun almost anything he desired, but that certain butter makers in successful creameries were already doing it; that a 16 per cent overrun could easily and legitimately be increased to 20 per cent or even 25 per cent overrun. That is, the skillful butter maker can make butter having in it only 80 per cent of butter fat just as easily and as certainly as he can make butter containing 86 per cent of butter fat" (p. 13).

APPENDIX 19

Threatened Corner in the Malaga Dried-Raisin Market

(Consul Gaston Smith, Malaga, Spain, Oct. 15, 1919)

An example of forward contracts not protected by any organized exchange.

The "Union Sindical de Almacenistas de Pasas," an association of dealers and exporters of Malaga dried raisins, fear financial loss on their export contracts. It appears that a number of these exporters have contracted to supply foreign importers, principally in Great Britain, with dried raisins at a specified price without taking the precaution of covering their contracts, and now the raisin producers and commission merchants, aware of these contracts, are holding back for higher prices. It is said that certain exporters to Great Britain will lose heavily in filling their contracts.

The principal exporters to the United States have been interviewed and they report that all their contracts will be promptly filled.

The raisin production of this district is estimated for 1919 at approximately from 1,150,000 to 1,200,000 boxes of 22 pounds each, so there is no shortage to justify the canceling of sales contracts.

The producers and commission merchants are not organized, but

due to high prices received they have made such large profits this season that they can afford to hold the remainder of their products indefinitely. *Commerce Reports*, No. 267, Nov. 13, 1919, p. 884.

APPENDIX 20

The Life of a Car of Grain Shipped by a Country Dealer to Lamson Bros. & Co., No. 6 Board of Trade, Chicago, with Documents Attached

Showing Protection to Shipper when dealing with member of organized Exchange.

When a car of grain is loaded at a country elevator the shipper usually informs us he is billing the car by mailing an advice of shipment (Ex. A), giving the car number, kind of grain, stating the approximate weights, the amount of draft, if any, and possibly specific directions in regard to the handling or information in regard to the quality of the grain to aid us in making sale to best advantage are given.

Often the advice of shipment is neglected, but a bill of lading (Ex. B) is issued by the railroad agent and the shipper fills in the name of the commission merchant to whom the car is going, destination, car number, kind of grain, and his weights. This is signed both by the shipper and the railroad agent and is forwarded to us either direct by mail or through a bank if draft is made.

As a rule the shipper will make draft (Ex. C), attaching the original bill of lading, for around seventy-five (75%) per cent of the value of the grain and when this draft is presented to us by a Chicago bank for collection, we honor it with our check.

The car moves by local freight to the nearest division point, then is usually placed in a through train for Chicago. If there is an unreasonable delay in transit, a tracer (Ex. D) is started in order that the car may be located and kept on its way.

When the car arrives in Chicago, a railroad notice (Ex. E) bear-

ing our name, the car number and initial, is sent to the State Grain Inspection Offices and the State Grain samplers are given the car number, so that official samples may be drawn from the load. The seal is broken by a railroad employee; then the sampler, using a grain trier, draws official samples from the different parts of the car. The condition of the car itself is inspected by a Board of Trade employee and a certificate (Ex. F) prepared for the shipper.

The official samples from the car are taken to the State Grain Inspection Offices, where licensed inspectors, using as a guide the federal grade specifications, determine in which grade the car should be placed. Test weight per bushel, moisture content, quality and color are all important factors in connection with the grade. An inspection certificate (Ex. G) in duplicate for the shipper and buyer is furnished by the State.

After the grade is established, part of the official sample is placed in a small paper bag (Ex. H), on which is written the car number, kind of grain, moisture content, test weight, and other details varying with the kind of grain; also the date of inspection. The railroad notice, also carrying details of the grade, is placed in the sample bag along with the grain, and the bag is then delivered to us on the Exchange floor, where it is shown to different buyers and finally sold to the industry, feed dealer or warehouse which will pay the most money. If the car is inspected before 11 A. M., it must be ordered that day to avoid car service, but if after 11 A. M., it need not be ordered until 6 o'clock the next day. The buyer gives us a written order (Ex. I) and these directions are followed in making out our order (Ex. J) to the railroad.

The bill of lading is surrendered to the railroad when the car is ordered and a receipt (Ex. K) secured. The trade made on the Exchange floor is confirmed by a check slip (Ex. L), giving the details of the trade, grade, price and terms of sale. Some buyers combine their order and confirm. Immediately after the car is sold on the Exchange floor a wire report (Ex. M) is sent to our branch office in the country nearest to the town from which the car was shipped, and information concerning the sale is 'phoned to the

country shipper and details given him which may be of value in connection with grain he may be buying from the farmers that day.

A letter telling of the sale (Ex. N) and a formal mail confirmation (Ex. O) of the trade are also sent to the shipper.

When the car arrives at the mill, warehouse or elevator of the buyer, it is unloaded, the grain officially weighed under supervision of the Board of Trade Weighmaster, and the next day a weight certificate (Ex. P) is furnished to us by the Weighmaster's office. A custodian receipt (Ex. Q) is also furnished by the Custodian Department under the supervision of the Weighmaster in connection with grain unloaded at certain elevators and warehouses. The buyer cannot dispose of the grain represented by the receipt until this receipt is canceled.

Our bill on the buyer based on the official weight certificate and the terms of sale made on the Exchange floor is made up the day the weight certificate is received in our office, so that there may be no delay in making final returns to the shipper, and the bill (Ex. R), with weight certificate, inspection certificate, custodian receipt, and bill of lading receipt attached, is rendered to the buyer before 2 P. M. who must, under the Exchange Rules, pay for the grain before 2:45 P. M. that day. On Saturdays the bill must be presented by 11:20 A. M. and paid by 11:50 A. M. that day.

While collection is being made from the buyer, we prepare a final statement, called an account sales (Ex. S), on the grain for the shipper, which carries the shipper's name, date car is sold, car number, official weights, number of bushels, grade, selling price, gross returns as a credit; then detailed charges, draft, freight and freight tax, inspection and weighing charges, interest on the draft, our commission, or any other necessary charges against the shipment. The net amount still due the shipper is shown and a check sent to him with the account sales, a copy of official weight certificate, inspection certificate and condition certificate.

The outline given covers the natural life of a consignment, but there may be extra difficulties encountered. A car may be wrecked in transit, which will necessitate a claim against the railroad com-

pany for the full value of the shipment. The car may be damaged in transit in such a way as to cause a grain leak, and we then make claim (Ex. T) for the shipper against the railroad company, using as a basis for the claim certified shipper's weights (Ex. U), a car condition blank, or information concerning damage to the car, and the price secured for the car when it was sold. The grain may be injured in transit by a leaking roof on the car and thus grounds established for a claim against the carrier. We are glad to render service to the shipper in connection with these claims and consider it due him in connection with commissions received from grain handled.

ADVICE OF SHIPMENT

11/25 1919

LAMSON BROS. & CO.

6 BOARD OF TRADE, CHICAGO

We have to-day shipped the following cars to you on Consignment

Please state whether cars are to be placed on contract or sold on the market.

RAILROAD	INITIAL	CAR NO.	GRADE	GRAIN	WEIGHT	DRAFT	POINT OF ORIGIN
SP	JC	76589	5 yel	Corn	19000	2000	Sanborn Ia

Yours truly,
Sanborn Grain & Live Stock Ex

EXHIBIT A.—Advice of Shipment.

Form 197

Uniform Bill of Lading—Standard form of Order Bill of Lading approved by the Interstate Commerce Commission by Order No. 787 of June 27, 1908

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY.

Shippers No. ______

ORDER BILL OF LADING — ORIGINAL.

Agents No. ______

RECEIVED, subject to the classifications and tariffs in effect on the date of issue of this Original Bill of Lading,

at Sanborn Iowa 11/25 1919,

from Sanborn Grain & Live Stk Exchange the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company agrees to carry to its usual place of delivery at said destination, if on its road, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions, whether printed or written, herein contained (including conditions on back hereof) and which are agreed to by the shipper and accepted for himself and his assigns.

The surrender of this Original ORDER Bill of Lading properly indorsed shall be required before the delivery of the property. Inspection of property covered by this bill of lading will not be permitted unless provided by law or unless permission is indorsed on this original bill of lading or given in writing by the shipper.

The Rate of Freight from ______

to ______ is in Cents per 100 lbs.

If ___ times 1st Class	If 1st Class	If 2nd Class	If 3rd Class	If 4th Class	If 6th Class	If Class A	If Class B	If Class C	If Class D	If Class E	If Special per ___	If Special per ___

(Mail Address—Not for purposes of Delivery)

Consigned to **ORDER OF** Sanborn Grain & Live Stock Exchange

Destination Chicago State of Ill County of ______

Notify Lamson Bros Co

At Chicago State of Ills County of ______

Route ______ Car Initial SC Car No. 26589

No. Packages	DESCRIPTION OF ARTICLES AND SPECIAL MARKS	WEIGHT (Subject to Correction)	CLASS OR RATE	CHECK COLUMN
	Corn			
	Specimen			

If charges are to be prepaid, write or stamp here, "To be Prepaid."

Received $______ to apply in prepayment of the charges on the property described hereon.

______ Agent or Cashier.

Per ______
(The signature here acknowledges only the amount prepaid.)

Charges Advanced:

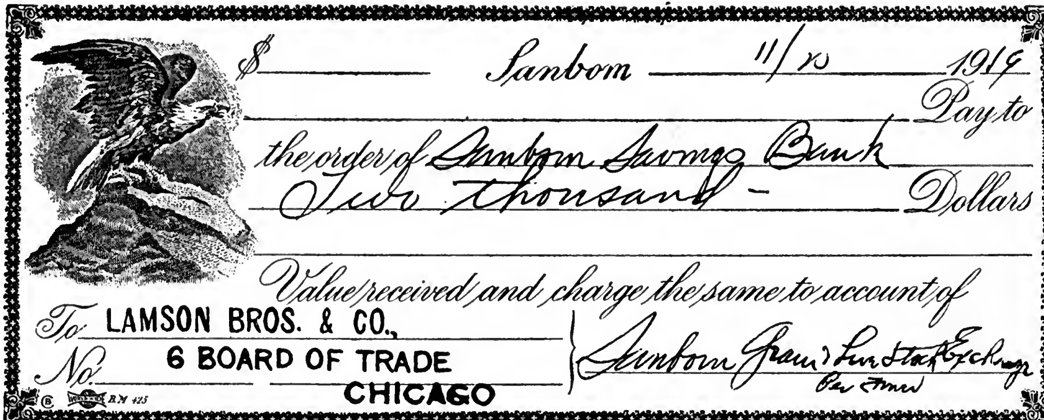
$______

Signed Sanborn Gr & Live Stock Co Shipper. E A Brown Agent.

Per Wells Per ______

(This Bill of Lading is to be signed by the shipper and agent of the carrier issuing same.)

Exhibit B.—Bill of Lading.


$ Sanborn 11/10 1919

Pay to the order of Sanborn Savings Bank

Two thousand - Dollars

Value received and charge the same to account of

To LAMSON BROS. & CO.,

No. 6 BOARD OF TRADE

CHICAGO

Sanborn Grain & Live Stock Exchange

Per [illegible]

B.M. 425

EXHIBIT C.—Draft, Paid before Arrival of the Car of Grain.

L. A. LAMSON. W. A. LAMSON. E. P. BAYES

LAMSON BROS. & CO.
6 Board of Trade.

GRAIN, PROVISIONS,
STOCKS & COTTON.

CHICAGO. 1/7/5-1919

C. O. S. Scannel
Car accountant
Omst P. RR

Dear Sir:-

The following cars have not arrived in Chicago up to the present writing. Please put wire tracer out on them and advise us last record by return mail.

Yours truly,

LAMSON BROS & CO.

-car no.-	-contents-	-shipped from-
JC 76589	Corn	Auburn Ill 11/25-1919

Exhibit D.—A Tracer.

UNITED STATES RAILROAD ADMINISTRATION
DIRECTOR GENERAL OF RAILROADS

No. 467

GRAIN BULLETIN NOTICE

SH R.R. Bluesmville (STATION) 12-13 19 19 HOUR 6 am M.

POINT OF ORIGIN	CAR NUMBER	INITIALS	CONSIGNEE	CONTENTS
Sanborn Ia	76589	Jc	Lamson Bros	Corn
SHIPPER	EX-CAR No.	INITIALS	NOTIFY	
			Same	

COPY TO BE GIVEN TO CONSIGNEE
(FOR USE OF STATE GRAIN INSPECTION DEPARTMENT)

BULK	BAGGED	BULK HEAD YES	BULK HEAD NO

SAMPLER'S RECEIPT STAMP HERE
REC'D
DEC 19 1919
GRAIN INSP DIVISION

GRAIN INSPECTOR'S STAMP HERE
INS
DEC 19 1919
By Illinois
Grain Inspection

BEFORE 11 A. M.

5 Yellow

NOTICE TO GRAIN SAMPLER

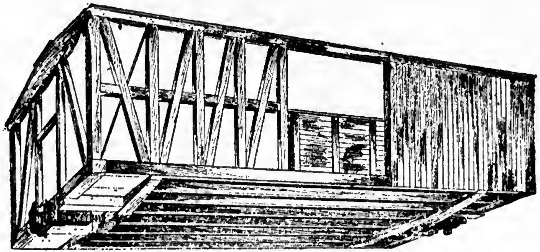
Car covered by this bulletin notice is now ready for sampling. If not located, this notice should be returned immediately with such advice.

EXHIBIT E.—Railroad Notice Sent by Consignee, upon Arrival of Car, to the State Grain Inspection Office.

ARRIVAL

CAR CONDITION AND SEAL RECORD

BOARD OF TRADE WEIGHMASTER



Chicago, Dec. 19 '19

INSPECTED BY

Deputy Q. Bagguley

At Galewood Yard

Chicago, Milwaukee & St. Paul R. R.

SEALS
- Side StP 972004
- Side 03
- Re-Seal a 116745

CONSIGNEE	CAR	NO.
Lam	JC	26589

Leaking Under Grain Door	☐	Leaking at Shifted Grain Door	☐
" At End of " "	☐	" End Window	☐
" Over " "	☐	" Lumber Door	☐
" Through " "	☐	" Loose Sheathings	☐
" Bulged " "	☐	" Side of Car	☐
" Broken " "	☐	" End of Car	☐
Leaking at Door Post	☐	" King Bolt	☐
" End Post	☐	" Draw Bar	☐
" Corner Post	☐	" Bottom of Car	☐

FEE 25 CTS.

H. A. FOSS,
WEIGHMASTER

By E. Fla

EXHIBIT F.—Car Condition Certificate.

LAMSON

STATE OF ILLINOIS

NO. 9804
DUPLICATE

GRAIN INSPECTION CERTIFICATE

Department of Trade and Commerce

DIVISION OF GRAIN INSPECTION

GENERAL OFFICE: 175 W. JACKSON BOUL., CHICAGO

IN INSPECTION

FEE

Chicago, DEC 10 191

I hereby certify that I hold a license under the United States grain standards Act to inspect and grade the kind of grain covered by this certificate; that I am employed by the Department of Trade and Commerce of the State of Illinois as a deputy grain inspector; that on the above date I inspected and graded the following lot or parcel of grain; and that the grade thereof, according to the official grain standards of the United States, is that stated below:

Car Initial I. C. Car No. 26589 Carrier C. M. ST. P.

Containing FIVE 5 YELLOW CORN Dockage %

Test Weight lbs. per bu. Moisture 20.6% Damaged %

Foreign Mtr. and Cracked Corn % Mh'gy %

Remarks

The amount of grain covered by this certificate is approximately one car load unless otherwise stated.

"This certificate covers inspection of grain while contained in above numbered car only, and does not represent the grade of the grain after it has been unloaded or transferred."

Countersigned:

109

DEPARTMENT OF TRADE AND COMMERCE

Wm. H. Boys Director

DIVISION OF GRAIN INSPECTION

Chief Grain Inspector

G. J. CASSIDY
LICENSED INSPECTOR

PER

Claims for review, re-inspection, or appeals under the rules of the Public Utilities Commission of Illinois (not including appeals under the U. S. grain standards Act) must be filed in this office within twenty four (24) hours from the time of initial inspection and before the grain inspected shall have been unloaded or has left this District.

(9988-300M-8-18)

EXHIBIT G.—Inspection Certificate.

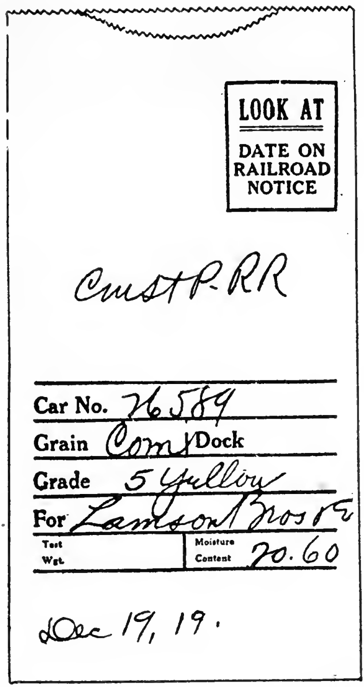


EXHIBIT H.—Paper Bag Containing Official Sample.

LAMSON BROS. & CO. *ORIGINAL*

CM&StP R. R. Co. *CHICAGO,* 12/20 1919

Please deliver

INITIAL	CAR NO.	KIND OF GRAIN
K	26589	Corn

To CRI&P *R'y*

for South Chicago Elevator "D"

Yours respectfully,

LAMSON BROS. & CO.

Per DU

TRANSIT.

Exhibit I.—Buyer's Order for Car Disposition.

Disposition Order

Chicago, Ill. 12/15 1919

Agent of C M St P Railroad

Fred. Klein Co., Printers, Chicago

CAR NUMBER	CAR INITIALS	CONTENTS	ORIGIN	DATE
26589	IC	Corn	Sanborn Iowa	11/25-1919

Please forward car shown above to South Chicago Elevator "D"

At So. Chicago via C R I & P Railroad

No change in foregoing instructions to be accepted without the surrender of the Original Receipt issued by carrier for this

NOTE A.—Disposition orders on this blank must be made STRAIGHT to the party named, and not to "Order" or "Notify."
NOTE B.—This blank to be used only for instructions to switch cars to points within the Chicago Switching District.

Lamson Bros. & Co.

Per

TRANSIT.

Exhibit J.—Disposition of Car, Ordered by Seller.

Chicago, Ill., 12/15 1919

Received of **Lamson Bros. & Co.** STRAIGHT / ORDER Bill of Lading for following car by the

Agent of C M & St P Railroad

Fred. Klein Co., Printers, Chicago

CAR NUMBER	CAR INITIALS	CONTENTS	ORIGIN	DATE
26589	IC	Corn	Sanborn Iowa	11/25-1919

With instructions to forward car mentioned to South Chicago Elevator "D"

At So. Chicago via C R I & P Railroad.

Said instructions have been received over the signature of party or parties to whom this receipt is issued.

In compliance with the original order for disposition no change in original instructions, of which the foregoing is a copy, will be [illegible]ted without the surrender of this Original Receipt.

> NOTE A.—Disposition orders on this blank must be made STRAIGHT to the party named, and not to "Order" or "Notify."
> NOTE B.—This blank to be used only for instructions to switch cars to points within the Chicago Switching District.

C. M. & ST. P. Railroad

N. W. Peirce Agent

TRANSIT.

EXHIBIT K.—Receipt for Bill of Lading. (Original.)

Chicago, Ill. 12/15 1919

Received of **Lamson Bros. & Co.** STRAIGHT / ORDER Bill of Lading for following car by the

Agent of C M St P Railroad

Fred. Klein Co., Printers, Chicago

CAR NUMBER	CAR INITIALS	CONTENTS	ORIGIN	DATE
26589	OC	Corn	Sanborn Iowa	11/25-1919

COPY

With instructions to forward car mentioned to South Chicago Elevator "D"

At So. Chicago via C R I & P Railroad.

Said instructions have been received over the signature of party or parties to whom this receipt is issued.

In compliance with the original order for disposition no change in original instructions, of which the foregoing is a copy, will be accepted without the surrender of this Original Receipt.

NOTE A.—Disposition orders on this blank must be made STRAIGHT to the party named, and not to "Order" or "Notify."
NOTE B.—This blank to be used only for instructions to switch cars to points within the Chicago Switching District.

C. M. & ST. P. Railroad

N. N. Pierce Agent

TRANSIT.

EXHIBIT K.—Receipt for Bill of Lading. (Copy.)

Chicago 12/20 1919

To J C Shaffer & Co

We hereby confirm SALES of car lots of Grain to you this day as follows. We request prompt attention to any errors in amount, grade, price or terms:

CAR NO.	GRADE	PRICE	TERMS
76589	5 Yel Corn	1.42	Chgo

LAMSON BROS. & CO.

THE FRED J. RINGLEY CO., CHICAGO

PER [illegible]

EXHIBIT L.—Confirmation Slip for Checking Accuracy of the Trade.

PHONE NO.

LAMSON BROS. & CO.
CHICAGO
PRIVATE WIRE

NO. 12/20 - 1919

REPORTED

S. K. Sanborn Grain & Live Stock Exchange
Sanborn Iowa

76589 5 Yellow Corn ~~test~~ 20.6
sold @ 1.42

Lamson Bros & Co

EXHIBIT M.—Telegraph Message Sent to Country Shipper, by Private Wire.

W A LAMSON
L F GATES
H M LOBDELL
G E BOOTH
H J ROGERS
E F THOMPSON
C L THOMSON
J M SIMPSON
J A WHITE

LAMSON BROS. & CO.

ESTABLISHED 1874

306 SO LA SALLE ST

CHICAGO

MEMBERS
CHICAGO BOARD OF TRADE
CHICAGO STOCK EXCHANGE
NEW YORK COTTON EXCHANGE
NEW YORK STOCK EXCHANGE

Dec. 20, 1919.

Sanborn Gr.& Live Stk. Exch.,
Sanborn, Ia.

Att. Mr. Wells

Gentlemen:

When your car of corn #26589 arrived today, inspecting #5 yellow, good quality but carrying 20.60 moisture near the limit for the #5 grade, we had difficulty making sale at $1.43,- a good price in today's market for corn with that much moisture in the #5 grade, and we trust it will mean satisfactory returns.

The first corn arrivals today brought from 1 to 2c less than late figures of yesterday. Before the close further weakness developed and late sales were full 3 to 4c lower than trades made early in the day. After the decline there appeared to be a better eastern demand and sales ranged as follows: #3 grades $1.46-1.52; 4 grades $1.43-1.46½; #5 grades $1.41-1.44; 6 grades $1.39-1.43. In a general way prevailing values appear to be justified.

Yours truly,

LAMSON BROS. & CO.
H. J. Rogers

HJR IKC

EXHIBIT N.—Letter to Country Shipper Telling of Sale of his Grain.

United States Food Administration License No. G-34033
United States Wheat Director License No. 4180 G. H.

LAMSON BROS. & CO.
ESTABLISHED 1874
COMMISSION MERCHANTS
306 So. La Salle St.

Chicago, 12/20 1919

M Sanborn Grain & Live Stock Exchange
Sanborn Iowa

We have this day SOLD the following cars for your account:

	CAR	INSPECTION	GRAIN	PRICE	TERMS	TEST	REMARKS	SHIPPED FROM
	26589	5 Yellow	Corn	1 42	Chicg	206		Sanborn

EXHIBIT O.—Formal Confirmation of Sale, Sent by Mail to Country Shipper.

OFFICIAL CERTIFICATE

BOARD OF TRADE WEIGHMASTER

90 BOARD OF TRADE BLD'G. CHICAGO — 12/26-19

THIS CERTIFIES That cars as specified below were weighed under the supervision of Deputy Weighman Q. Brissen at South Chicago Elevator "D" and that the weights shown hereon are correct

CONSIGNEE.	CAR.	NO.	NET WEIGHT.	CONTENTS.
Lamson	I C	26589	78500	Corn

HOPPER SCALE

FEES 75 CENTS

SEALS SIDE St Pa 116745
SIDE G 72003

H. A. Foss. WEIGHMASTER.

BY S. G.

Exhibit P.—Official Weight Certificate.

19855

Duplicate

ACCOUNT SALES CHICAGO, 12/27 1919

LAMSON BROS. & CO.

COMMISSION MERCHANTS

BOARD OF TRADE

FOR ACCOUNT AND RISK OF Sanborn Grain & L. S. Exchange
Sanborn Ia

	Date Sold	Car No.	Weight	Bushels	Grade	Price	Amount
	12-20	26589	78500	1401 44	59C	142	1990 54
				Frt Tax	4 83		
Advance Charges 205 Freight 160 93 Inspection Car service 2 06 Reconsigning 2 06						169 88	
Reinsp. ~~stge.~~ etc. 1 50 Inspection 1						2 50	
Weighing 75 Car Inspector 25						1 —	
Draft 2000 Paid 11-28 Interest to 12-27						10 48	
Commission						19 91	203 77
Net Proceeds to your credit							1786 77

Exhibit S.—An Account Sales which is sent to the shipper. The shipper has overdrawn his account $213.23

K 1799 ... PRINTERS, ST. LOUIS   Form No. 1P—Loss and Damage D. O.

UNITED STATES RAILROAD ADMINISTRATION

Standard Form for Presentation of Loss and Damage Claims.

Approved by the Interstate Commerce Commission, National Industrial Traffic League, and Various Other Traffic Organizations.

H. E. HELLER G.C.A. (Name of Person to Whom Claim is Presented) — CHICAGO. (Address of Claimant) — 105 (Claimant's Number)

C.B.Q. R.R. (Name of Carrier) — 11/11/19 (Date) — (Carrier's Number)

ST.LOUIS, MO. (Address)

This claim for $ 64.94 (Amount of Claim) is made against the carrier named above by LAMSON BROS. & CO. (Name of Claimant)

for LOSS IN TRANSIT (loss or damage) in connection with the following described shipments:

Description of shipment CAR OF OATS

Name and address of consignor (shipper) DENNIS GRAIN CO.

Shipped from HUMESTON, IOWA (City, town or station) To ST.LOUIS, MO. (City, town or station)

Final Destination LOUISVILLE, KY. (City, town or station) Routed via C.B.Q. & SOU.

Bill of Lading issued by C.B.Q. Co.; Date of Bill of Lading 7/29/19

Paid Freight Bill (Pro) Number 10700; Original Car Number and Initial C.M. 89926

Name and address of consignee (Whom shipped to) LAMSON BROS. & CO.

If shipment reconsigned enroute, state particulars: RECONSIGNED AT ST. LOUIS TO LOUISVILLE, KY VIA SOUTHERN R.R.

DETAILED STATEMENT SHOWING HOW AMOUNT CLAIMED IS DETERMINED.

(Number and description of articles, nature and extent of loss or damage, invoice price of articles, amount of claim, etc.)

LOADED	62470#	
UNLOADED	59200	
	3270	
LESS 1/8 of 1%	78	
	3192# - 99.24 bu. at 70c	$69.82
LESS FREIGHT 14.5 TAX		4.88
	Total Amount Claimed	$64.94

IN ADDITION TO THE INFORMATION GIVEN ABOVE, THE FOLLOWING DOCUMENTS ARE SUBMITTED IN SUPPORT OF THIS CLAIM.*

( ) 1. Original bill of lading, if not previously surrendered to carrier.
( ) 2. Original paid freight ("expense") bill.
( ) 3. Original Invoice or certified copy.
4. Other particulars obtainable in proof of loss or damage claimed:
COPY EXPENSE BILL ORIGINAL WITH Q. FOR O/C CLAIM CBQ 75009
INSPECTION AND CAR REPORT AT ST.LOUIS

REMARKS AFFIDAVIT SHIPPERS WEIGHT
UNLOADED WEIGHT CERTIFICATE
COPY OF ACCOUNT SALES.

The foregoing statement of facts is hereby certified to as correct. LAMSON BROS. & CO. (Signature of Claimant)

§Claimant should assign to each claim a number, inserting same in the space provided at the upper right hand corner of this form. Reference should be made thereto in all correspondence pertaining to this claim.

*Claimant will please place (x) before such of the documents mentioned as have been attached, and explain under "Remarks" the absence of any of the documents called for in connection with this claim. When for any reason it is impossible for claimant to produce original bill of lading, or paid freight bill, claimant should indemnify carrier or carriers against duplicate claim supported by original documents.

EXHIBIT T.—Claim against the Railroad.

State of Iowa }
Tama County } SS

I, John A. Beery on oath do state that on Jan. 20.1920 I consigned to Lamson Bros.& Co.,Chicago 91840 lbs. 1640 bu.shelled corn in AARR car #11351.

John A. Beery

Suscribed and sworn to before me on this 26 day of January 1920.

Erwin Beery
Notary Public.

RECEIVED
JAN 27 1920

Exhibit U.—Shipper's Certified Weight Statement.

APPENDIX 21

An Argentina Need

There is no "gambling" in grain in Argentina, so frequently denounced in our Congress and by the public in this country. The grain business in Argentina is in the hands of a "trust," which pays its own price as a rule for the products of the soil, exacting an enormous toll not only on the grain, but even on the bags which are furnished for transporting the grain.

What the Argentine producer would like to have is a great Chicago or Minneapolis market where he could know just what the world thinks concerning grain prices. What he has are a few enormously wealthy exporters setting their own price upon his product.

Argentina will never be a great agricultural country until she emerges from the chrysalis of monopoly which surrounds her grain trade. If the American farmer desires to test the efficacy of our own system of marketing and handling grain and of our own methods of establishing prices for grain, let him proceed to study the Argentina system.

I returned with a most wholesome respect for the American farmer, and I realize as never before, that the stability of this country depends upon the prosperity of the man who produces its wealth just as much or perhaps more than the man who consumes the products of the soil. But I also came back with a more intelligent regard for the great economic system which prevails in this country, which enables us to market grain at a minimum of profit between the man who produces it and the man who consumes it. Pickell, J. Ralph, *Agricultural Argentina*, pp. 58–59.

APPENDIX 22

Reference Library for a Board of Trade

1. Annual Reports of all organized exchanges, domestic and foreign.
2. All publications (in English) of International Institute of Agriculture, Rome.
3. Daily Consular and Trade Reports, Department of Commerce, Washington.
4. Yearbook, U. S. Department of Agriculture, Washington.
5. U. S. Census Reports (Decennial and Special).
6. United States Industrial Commission Report, 19 Volumes, Washington.
7. United States Commission on Industrial Relations Report, Washington.
8. Report of Country Life Commission.
9. Current Periodicals dealing with the grain trade and allied interests, such as hay, seeds, milling, grain elevators, the country shipper, farmers' elevators, etc. Including Broomhall's Corn Trade News, Liverpool. Also current yearbook, Miller's Almanacks, Price Current Bulletins, Market Reporters, etc., of all kinds from every market possible. In particular, a complete set of daily price bulletins for the local market should be on file. The list of periodicals should include representative farm papers, particularly official organs of farmers' organizations, including the Grain Growers' Guide of Winnipeg and the Coöperative Elevator News of Saskatchewan (Regina).
10. Hearings, Committee Reports, Congressional Investigations, Interstate Commerce Commission Hearings and Investigations. All federal and State reports involving grain exchange practices and the grain trade in general.
11. Proceedings of the Grain Dealers' National Association, complete, Also "Who's Who in the Grain Trade."

12. Proceedings of the various State Grain Dealers' Associations, including the Farmers' Grain Dealers Associations, complete.
13. Weighing, Inspecting, Grading. Complete Reports from each state (or each Exchange exercising this function) of the departments having charge of grain weighing, inspection and grading.
14. Elevators and Warehouses. Complete reports from each State Railroad and Warehouse Commission (or other similar body with jurisdiction) covering the subject of warehousing grain.
15. Bulletins of the U. S. Department of Agriculture, the State Colleges of Agriculture, the State and Federal Experiment Stations, dealing with the production and marketing of farm products. The Experiment Station Record and the Monthly Crop Reporter should also be included, both issued by the U. S. Department of Agriculture.
16. Canadian Documents on the Grain Trade:
    (1) Report of the Royal Commission on the Grain Trade of Canada, 1906, Ottawa.
    (2) Report of the Elevator Commission of the Province of Saskatchewan, 1910, Regina.
    (3) The Canada Grain Act of 1912 with Amendments. Ottawa.
    (4) Grain Inspection in Canada, by R. Magill, chief commissioner Board of Grain Commissioners of Canada. Issued by the Department of Trade and Commerce, Ottawa.
    (5) Report of the Grain Markets Commission of the Province of Saskatchewan, 1914, Regina.
    (6) Annual Reports Department of Trade and Commerce: Grain Statistics, Ottawa.
17. Progress Reports from the Royal Commission on the Marketing, Transportation and Storage of Grain. Presented to the Parliament of Victoria, Australia, 1913. Melbourne.
18. Wheat and Flour Prices from Farmer to Consumer. Bulletin U. S. Bureau of Labor Statistics, No. 130. Washington.

Miscellaneous Material

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Afanessieo, G., Le Commerce des Céréales en France, 1894.

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Poncador, Bruno Heinrich. Wesen und wirkung der agrarzölle. Jena, 1911.

Jöhlinger, Otto, Die praxis des getreidegeschäftes an der Berliner Börse.

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Das getreide im weltverkehr. Statistische tabellen über production, handel, consum, und preise. Dritte folge. Zusammengestellt im auftrage des K. K. Ackerbauministeriums durch die K. K. statistische zentralkommission. Wien, 1909.

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NUMBER
V 69500

OFFICIAL CERTIFICATE

OF THE

Custodian Department of the Board of Trade

OF THE CITY OF CHICAGO

CAR LOT CERTIFICATE

Chicago, Illinois, 12/26 1917

I Hereby Certify, That this day at So Chicago Ele D the contents of the car specified below was unloaded under the supervision of this Department which will not be loaded out except upon surrender of this receipt for cancellation as provided in the rules and regulations of the Board of Trade of the City of Chicago, governing the Custodian Department.

	CAR	NUMBER	WEIGHT	CONTENTS
	76589	IC	78500	Corn

This certificate is not to be used as collateral. A collateral certificate can be secured in its stead by presenting this certificate for cancellation.

H. A. FOSS, CUSTODIAN

BY ____________

EXHIBIT Q.—Custodian's Receipt.

J. C. Shaffer & Co

№ 86461

R. R. C M & St P Elev. So Chicago Ele D 1/2

CHICAGO, 12/27 1919

To LAMSON BROS. & CO., Dr.

306 South La Salle Street

UNITED STATES FOOD ADMINISTRATION License Number G 34033

Sold 12/20 Car C 76589

	POUNDS	BUSHELS	GRADE	PRICE	TERMS			
	78500	1401 44	5 Yel Corn	142	Chgo	1990	54	
			Less weighg fee				75	
						1989	79	

PAID
DEC 27 1919

Exhibit R.—Seller's Bill Sent to the Buyer of the Grain.